

FIG. 2

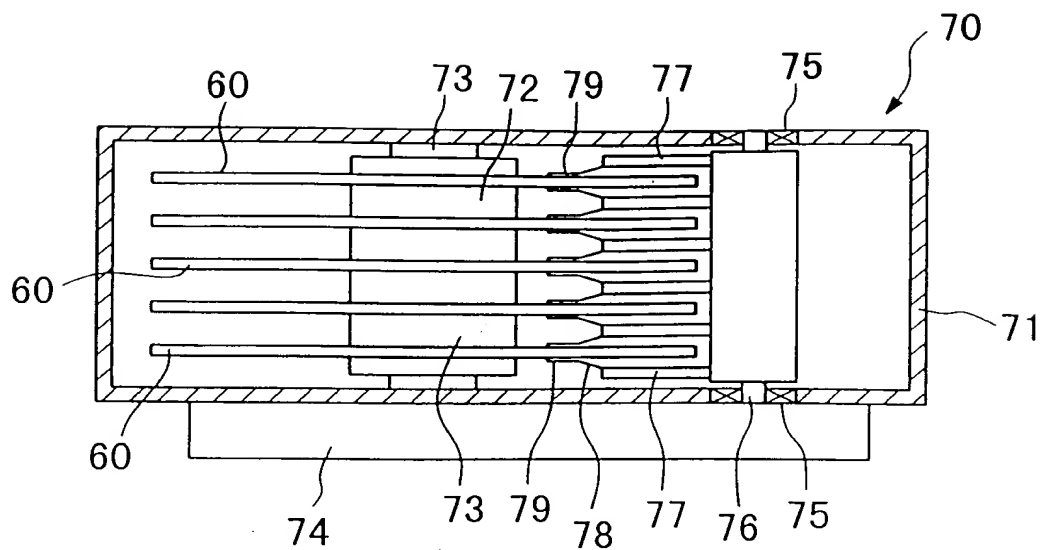


FIG. 3

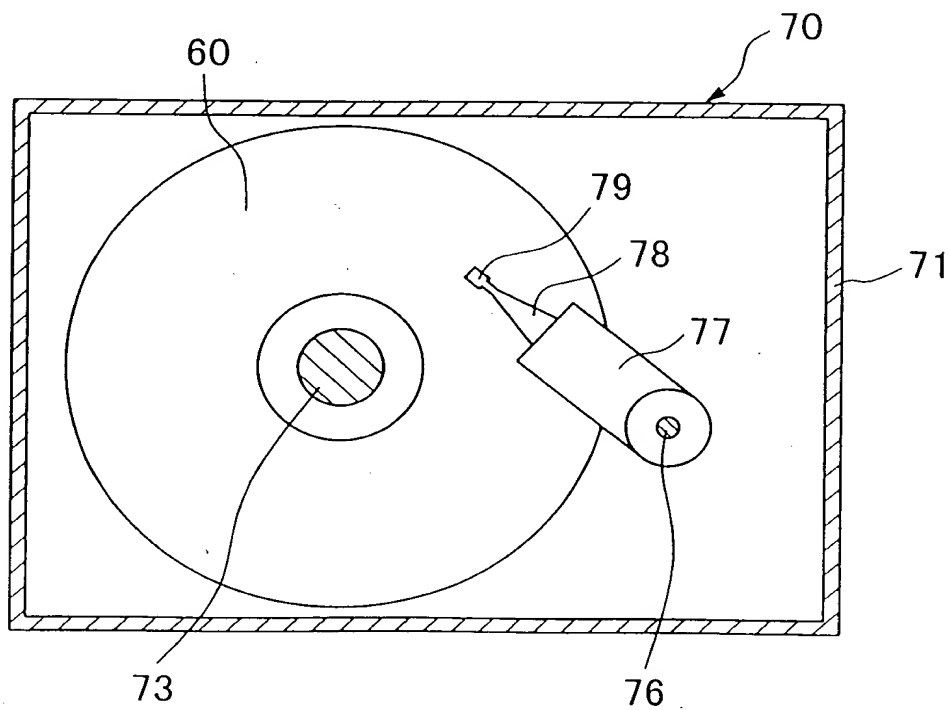
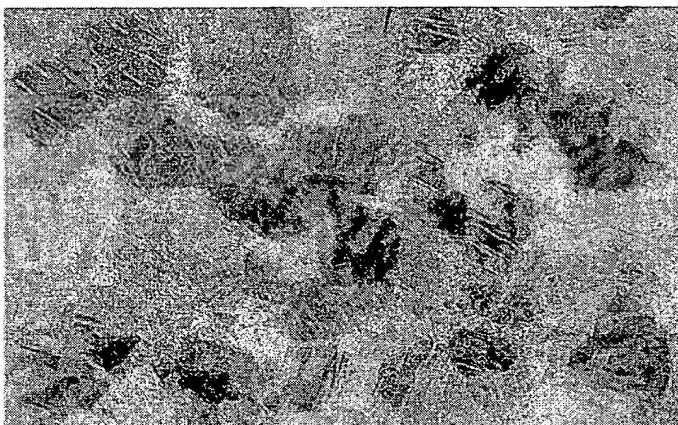


FIG. 4A

 $\text{Cr/CoNi}_{12.5}\text{Cr}_{15}\text{Ta}_{3.5}\text{Pt}_5$: 5nm/15nm O_2 : 0L

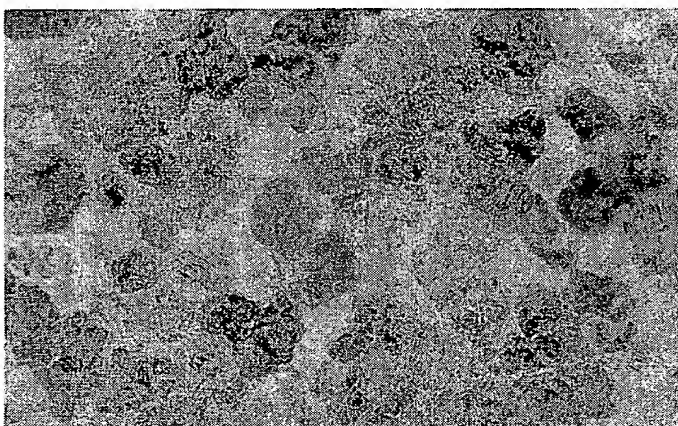
G. D. : 10.8nm

FIG. 4B

 O_2 : 1.5L

G. D. : 9.8nm

FIG. 4C

 O_2 : 3.5L

G. D. : 9.3nm

20nm

FIG. 5

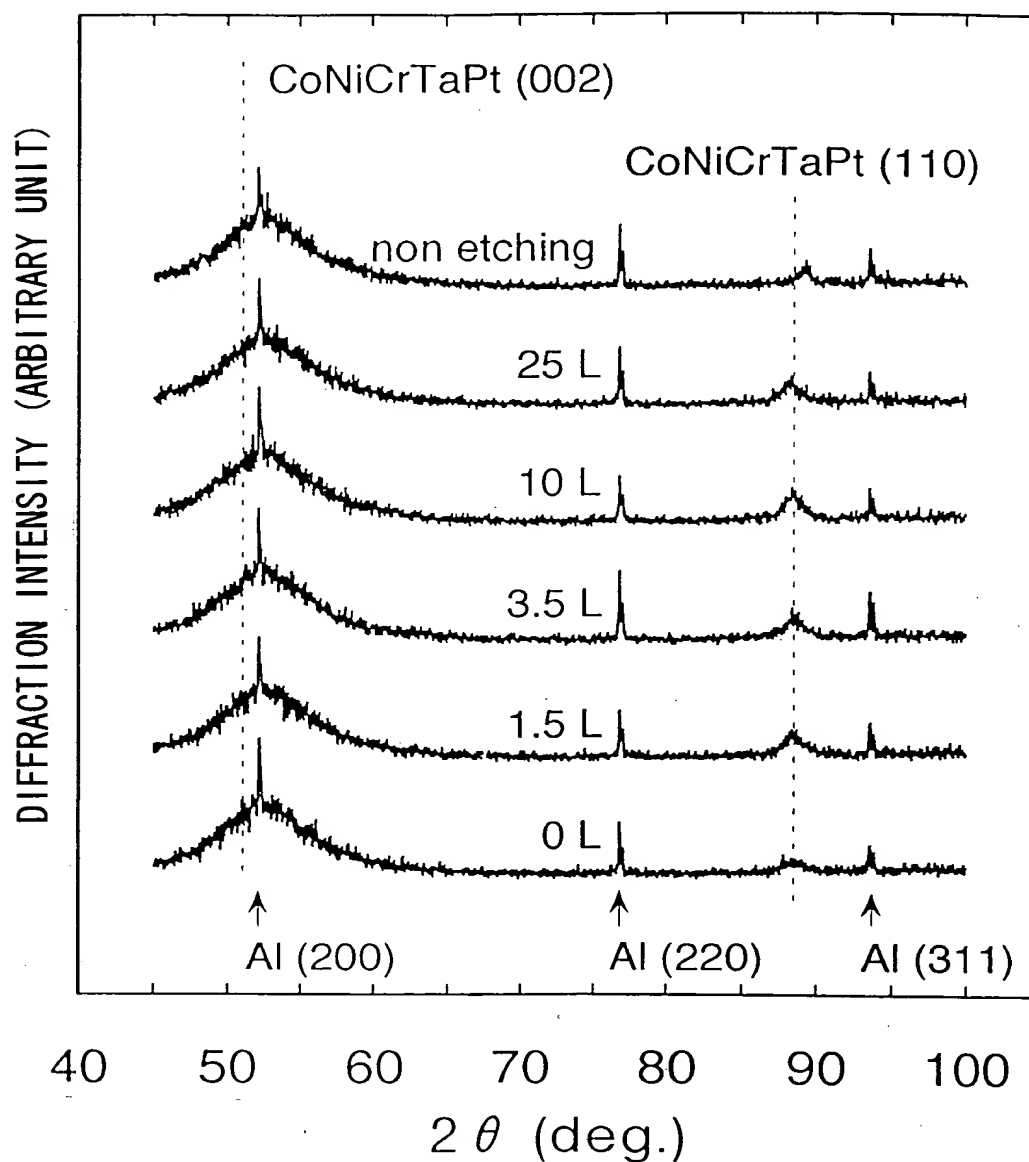
Al-sub. - Cr / $\text{CoNi}_{12.5}\text{Cr}_{15}\text{Ta}_{3.5}\text{Pt}_5$ = 5 / 30 nm, $T_{\text{sub.}} : 250^\circ\text{C}$ $T_{\text{DE}} : 5 \text{ sec}$ (O_2 EXPOSURE IMMEDIATELY
BEFORE FILM FORMATION)

FIG. 6

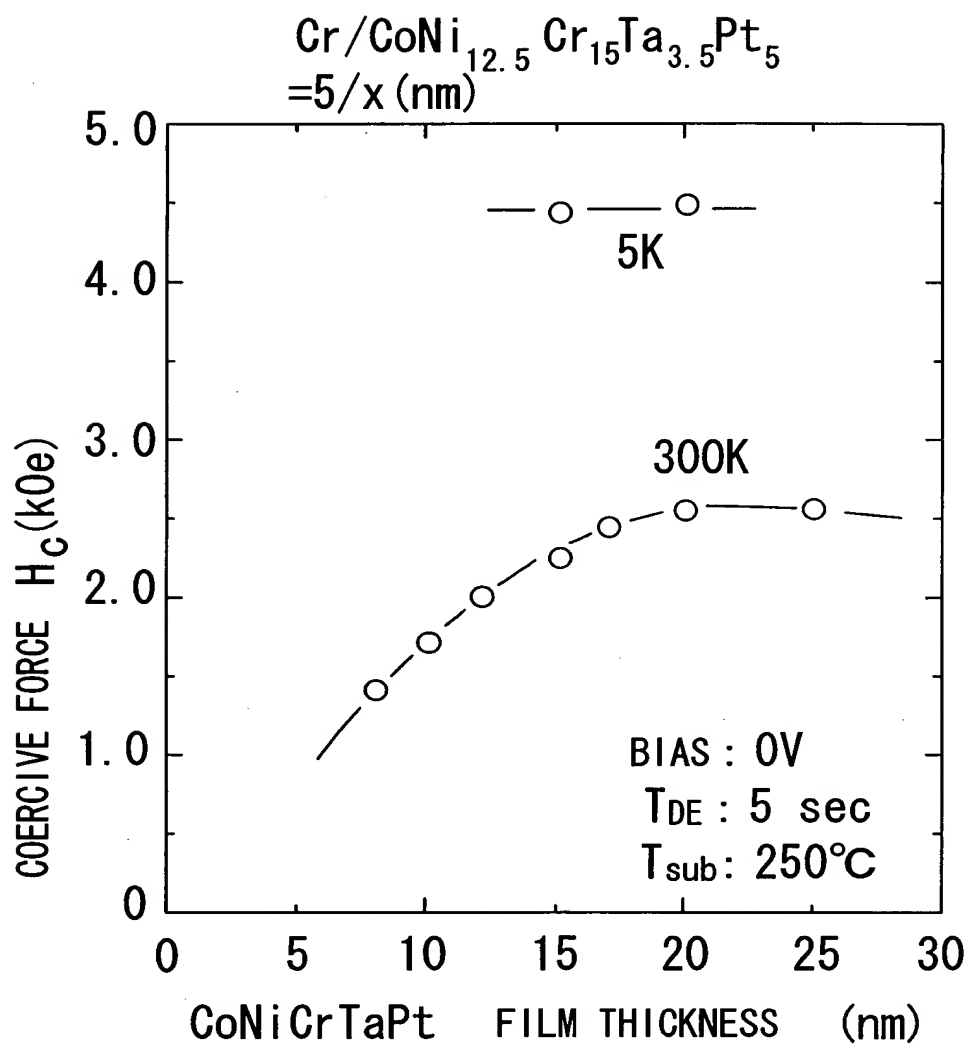


FIG. 7

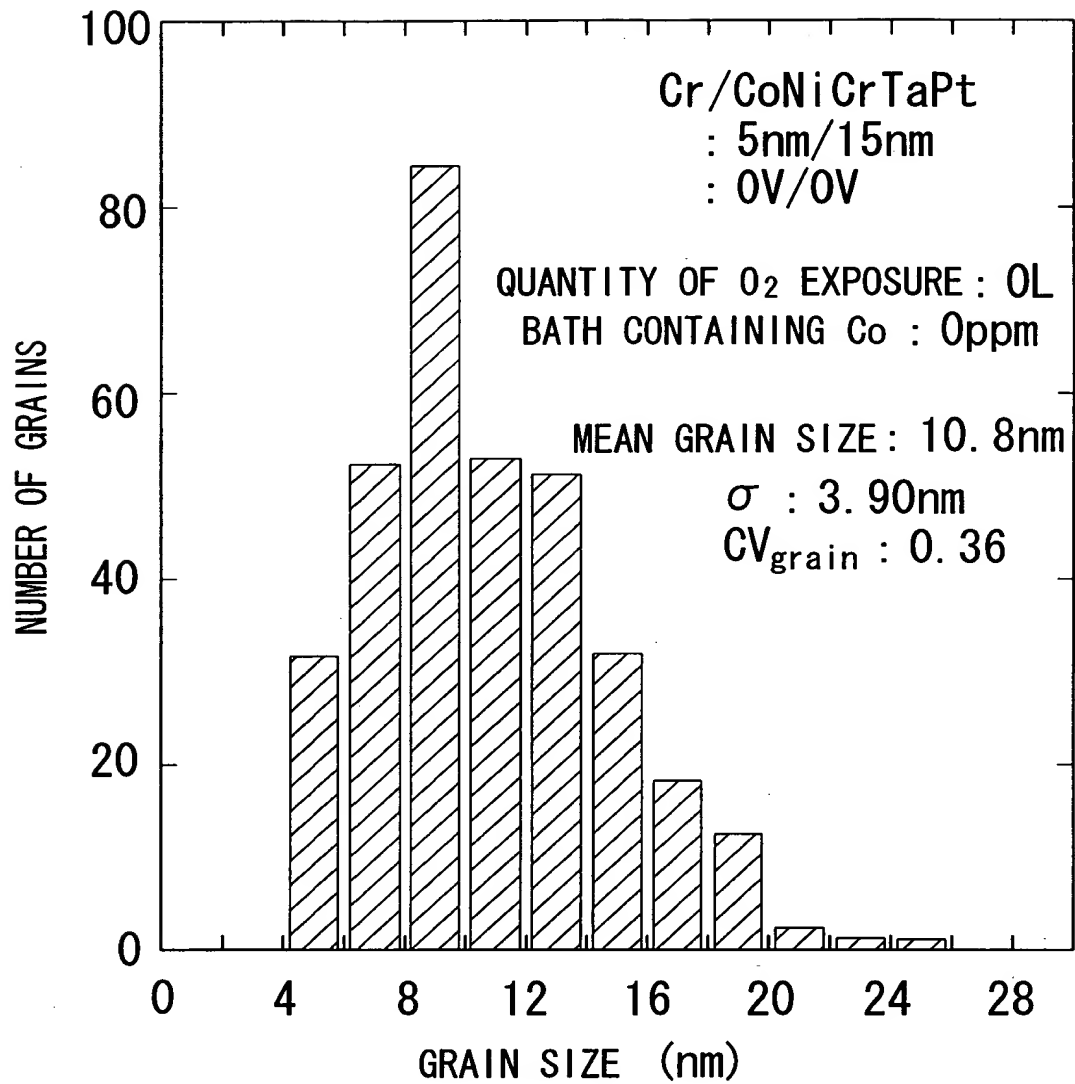


FIG. 8

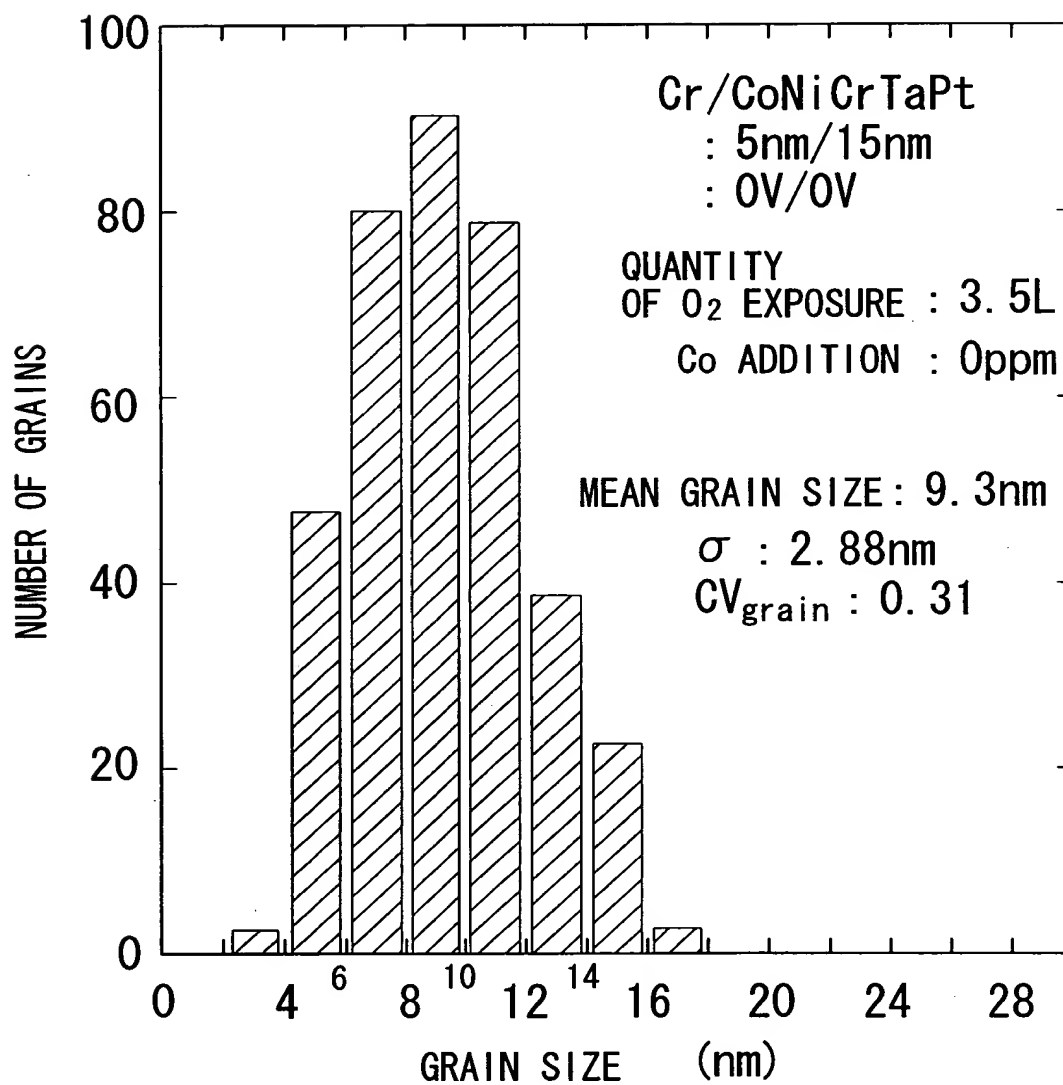


FIG. 9

$\text{Cr/Co}_{64}\text{Ni}_{12.5}\text{Cr}_{15}\text{Ta}_{3.5}\text{Pt}_5$ (5nm/15nm)

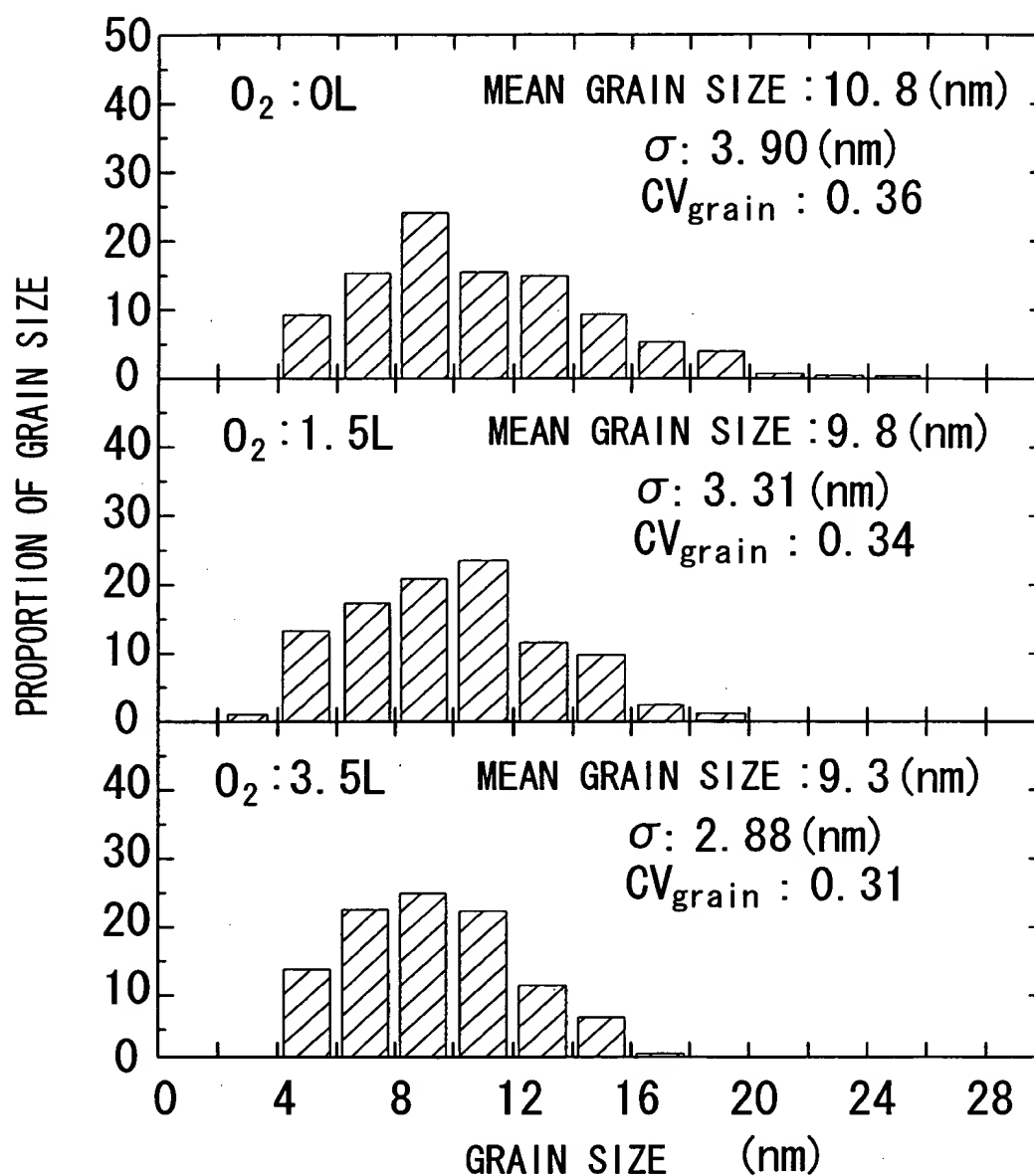


FIG. 10

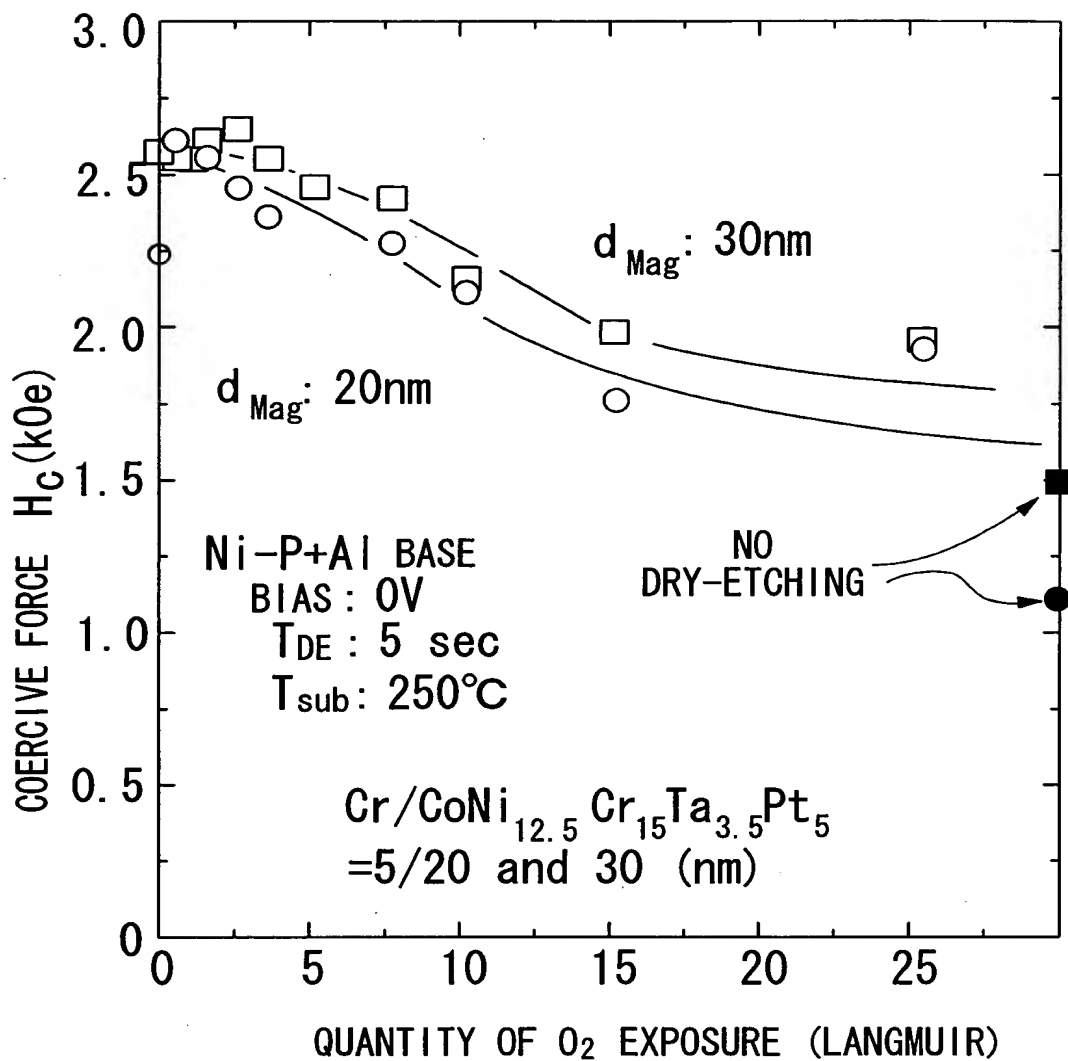


FIG. 11

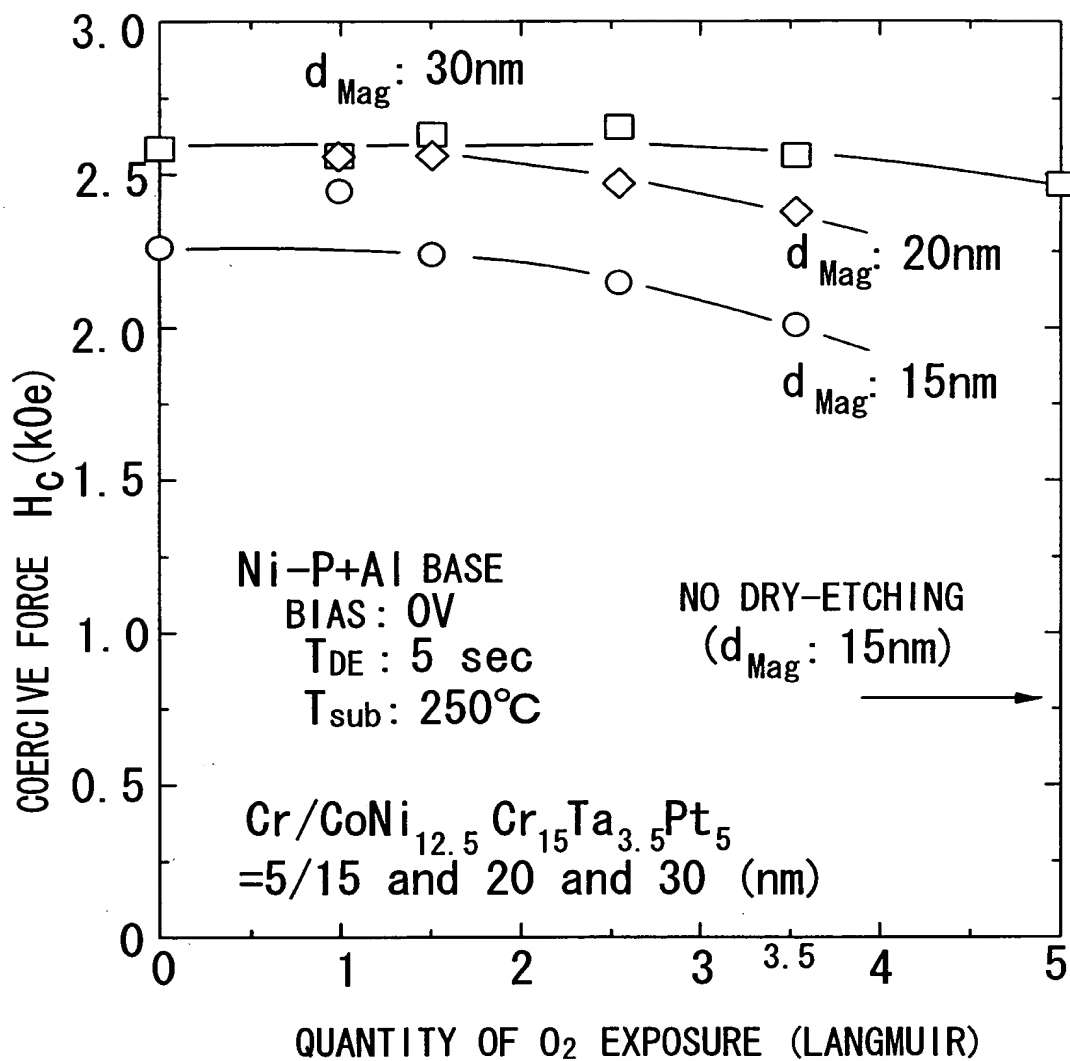


FIG. 12

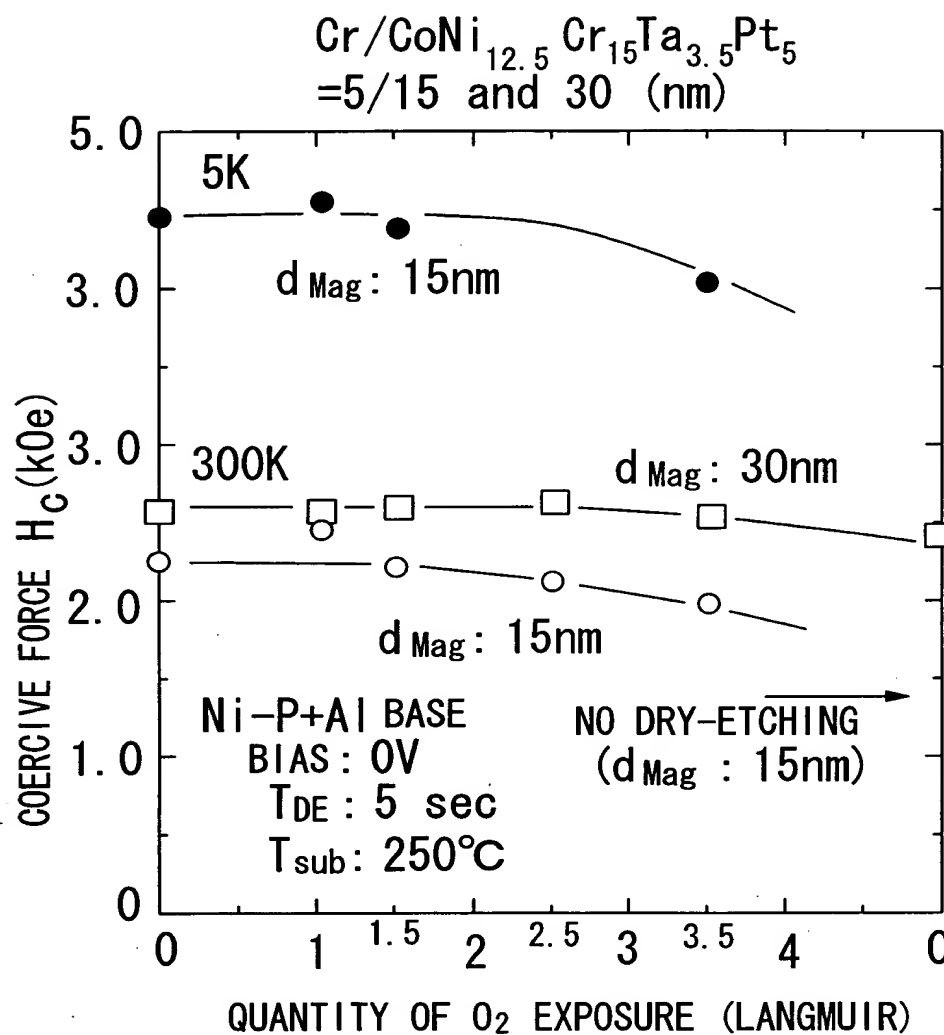


FIG. 13

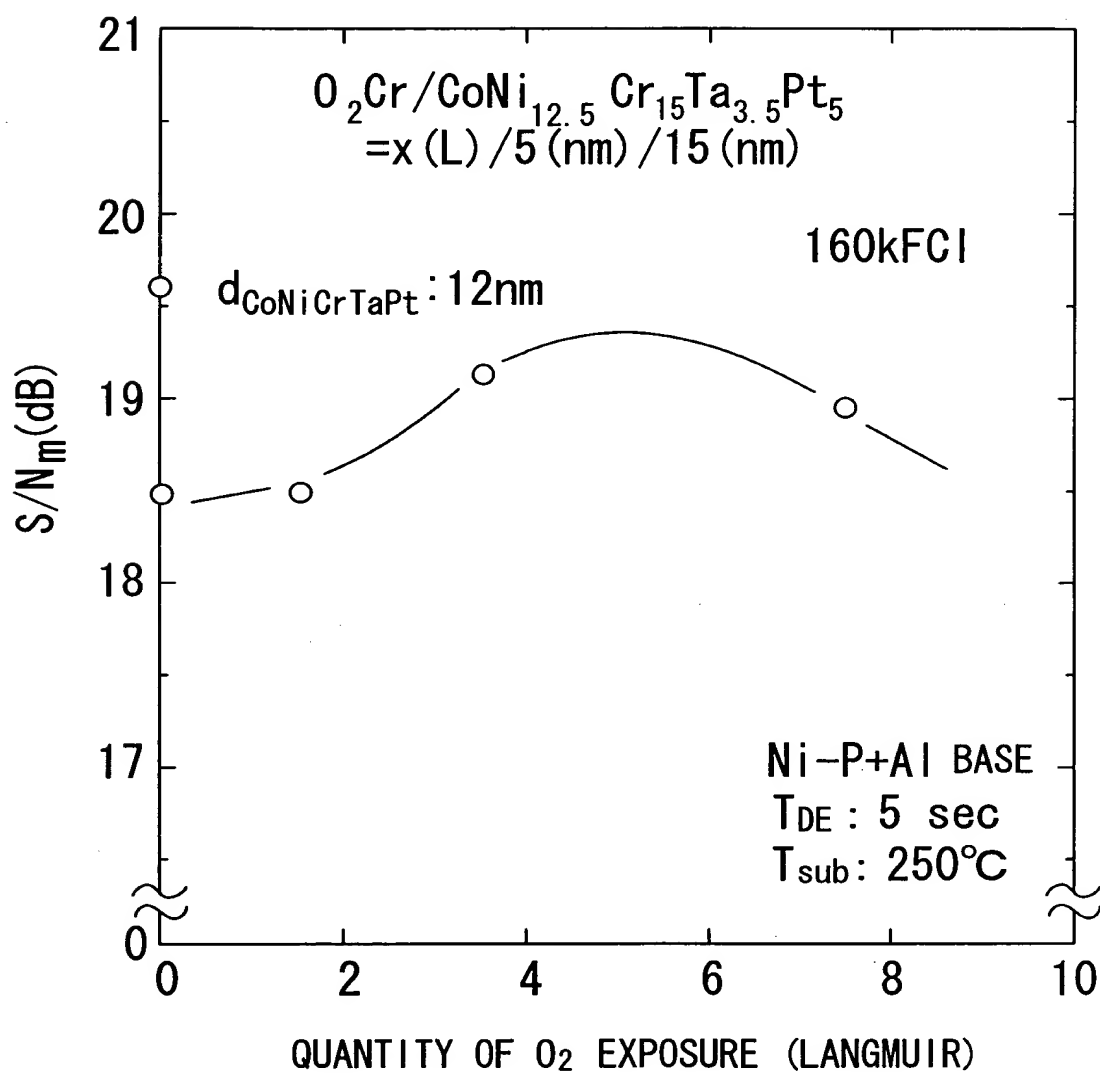
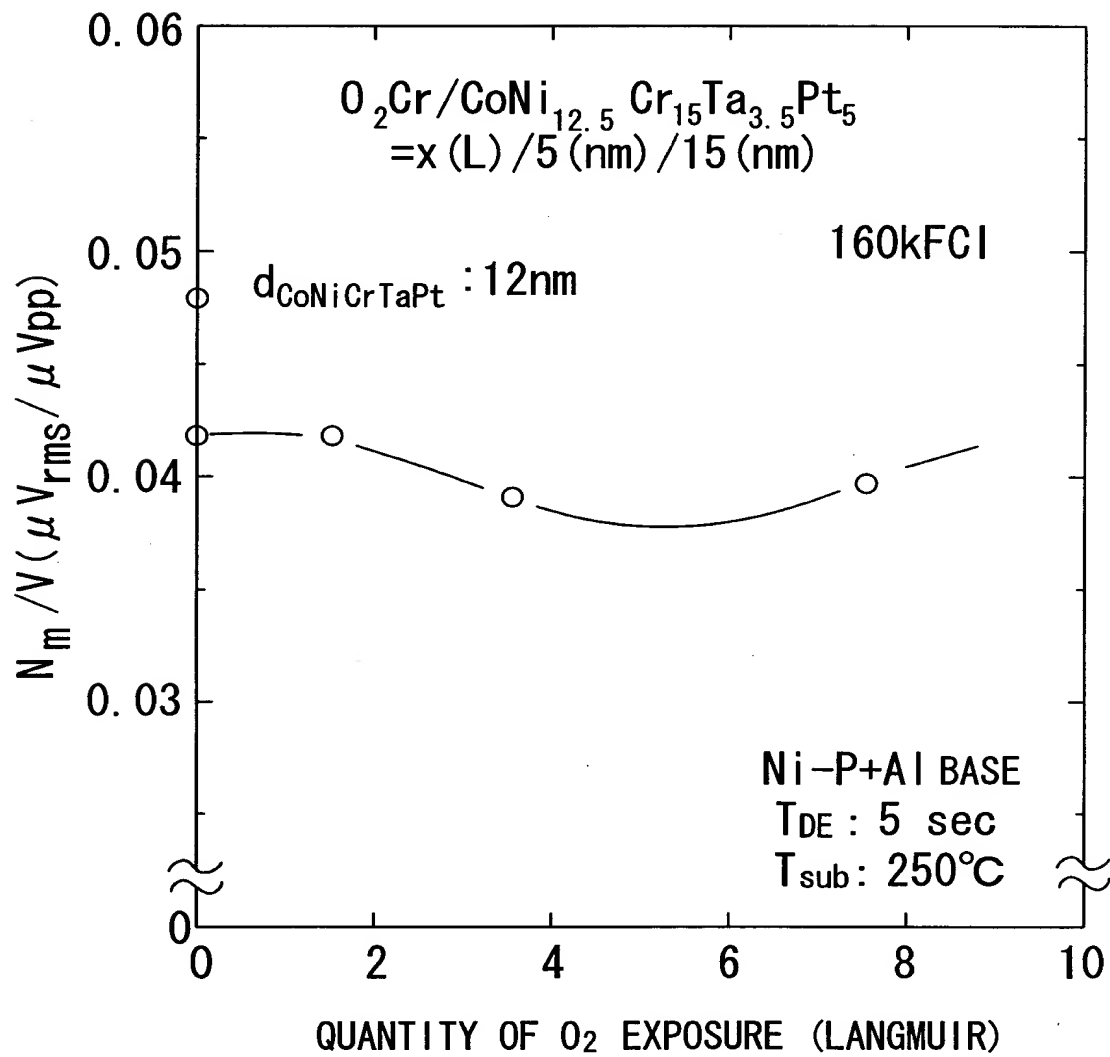


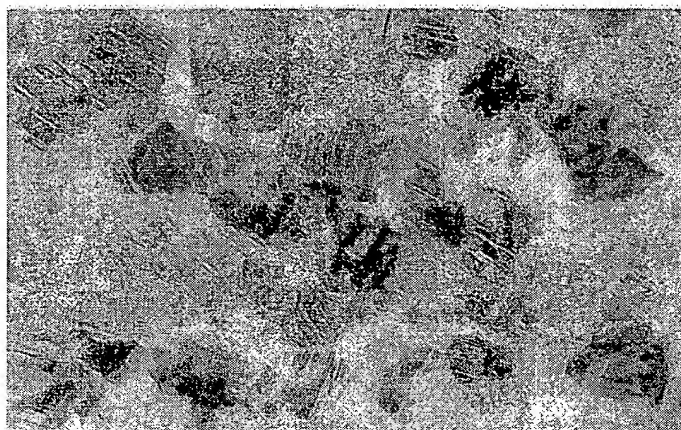
FIG. 14



$\text{Cr/CoNi}_{12.5}\text{Cr}_{15}\text{Ta}_{3.5}\text{Pt}_5$: 5nm/15nm

FIG. 15A

QUANTITY OF O_2 EXPOSURE : 1.5L

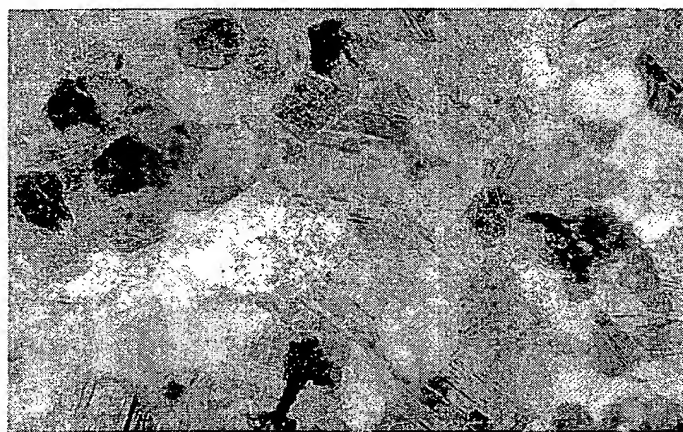


Co CONTENT
: 0ppm

G. D. : 9.8nm

20nm

FIG. 15B



Co CONCENTRATION
: 30ppm

Co CONTENT
: 0.003 (wt. %)

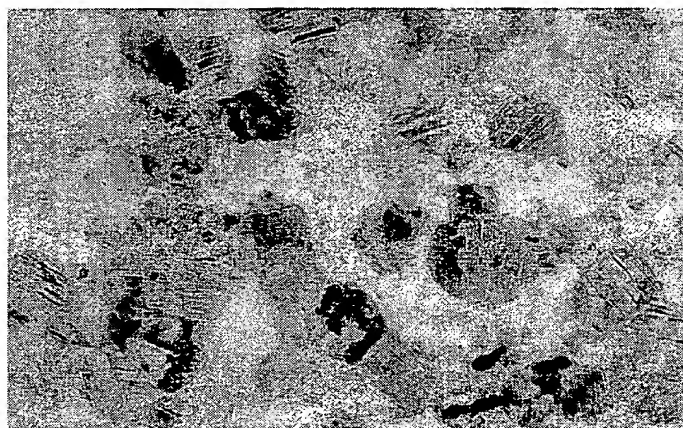
G. D. : 9.6nm

20nm

Cr/CoNi_{12.5}Cr₁₅Ta_{3.5}Pt₅ : 5nm/15nm

FIG. 16A

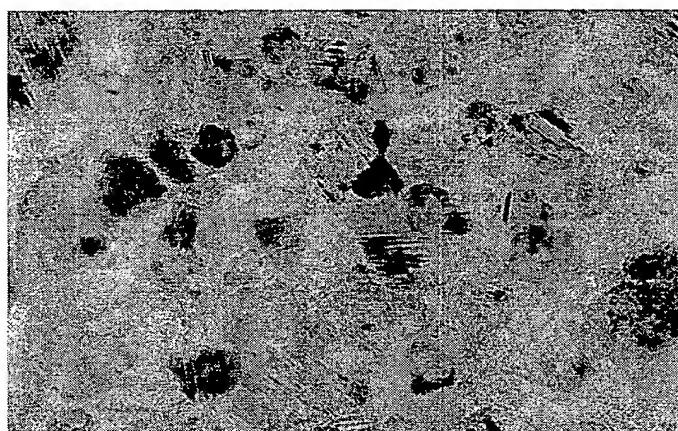
QUANTITY OF O₂ EXPOSURE : 1.5L



Co CONCENTRATION
: 100ppm
Co CONTENT
: 0.04 (wt. %)
G. D. : 8.8nm

20nm

FIG. 16B



Co CONCENTRATION
: 300ppm
Co CONTENT
: 0.13 (wt. %)
G. D. : 8.6nm

20nm

FIG. 17

$\text{O}_2 / \text{Cr} / \text{CoNi}_{12.5}\text{Cr}_{15}\text{Ta}_{3.5}\text{Pt}_5$
= 1.5 L / 5 / 15 nm, $T_{\text{sub.}} : 250^\circ\text{C}$

$T_{\text{DE}} : 5 \text{ sec}$ (O_2 EXPOSURE IMMEDIATELY
BEFORE FILM FORMATION)

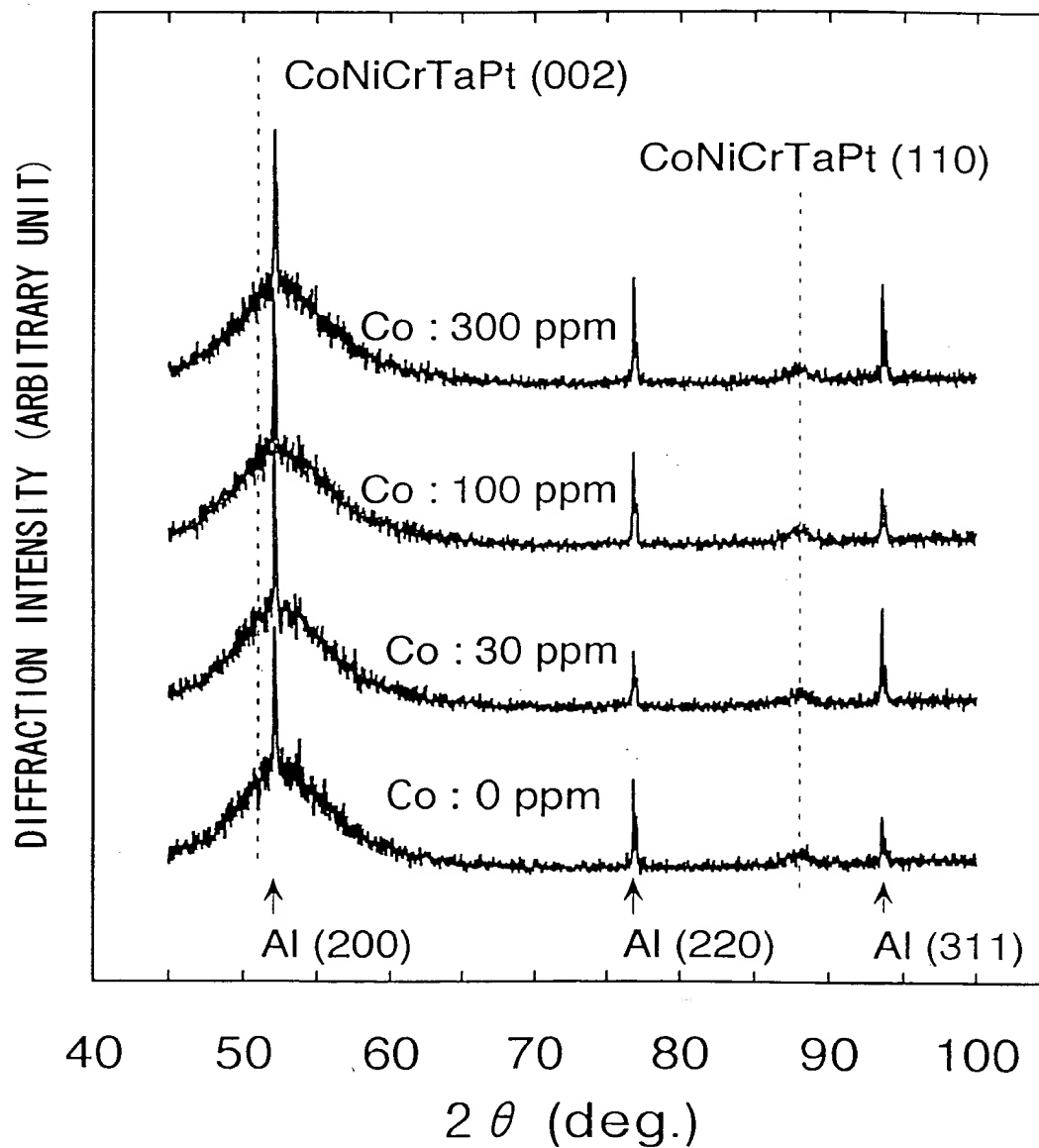


FIG. 18

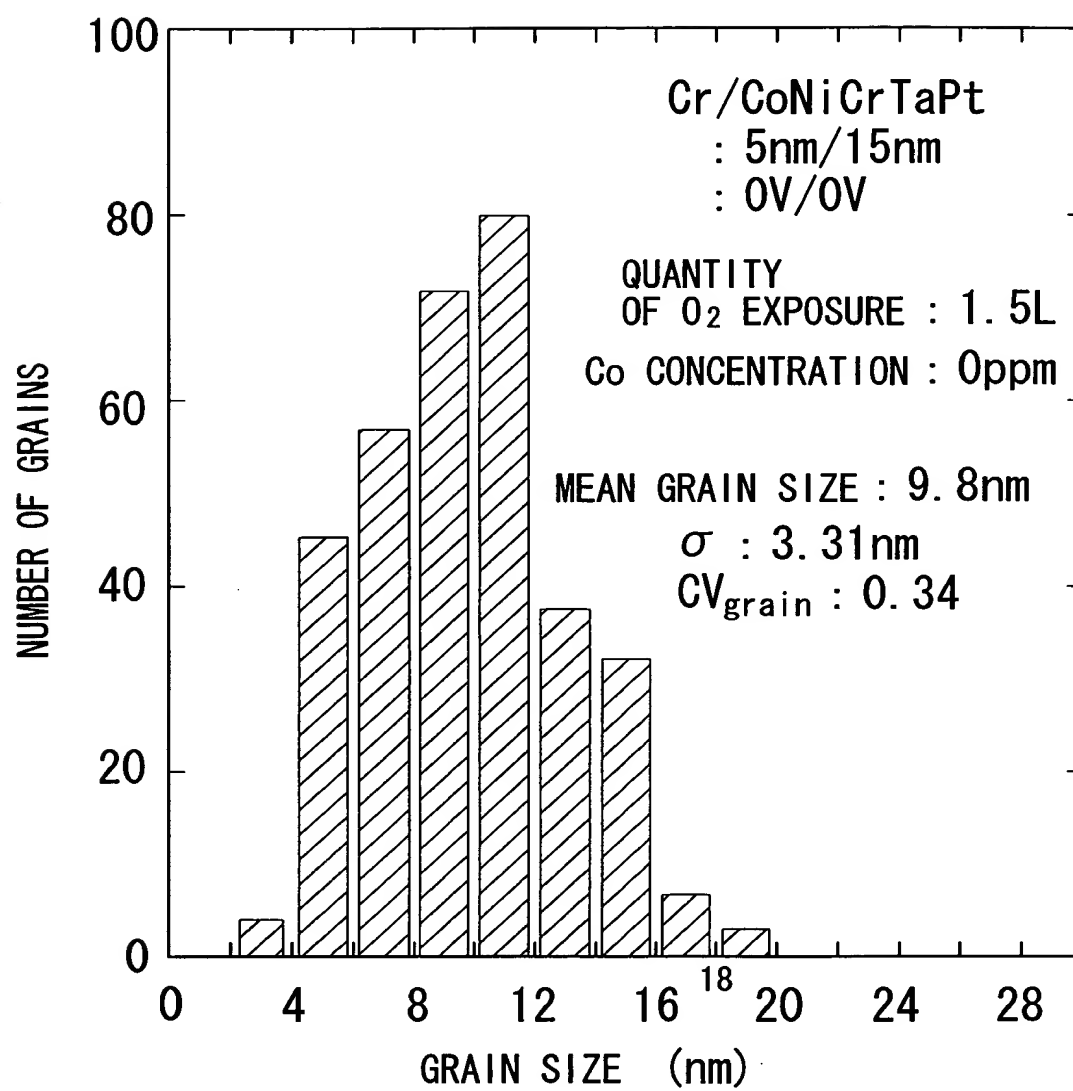


FIG. 19

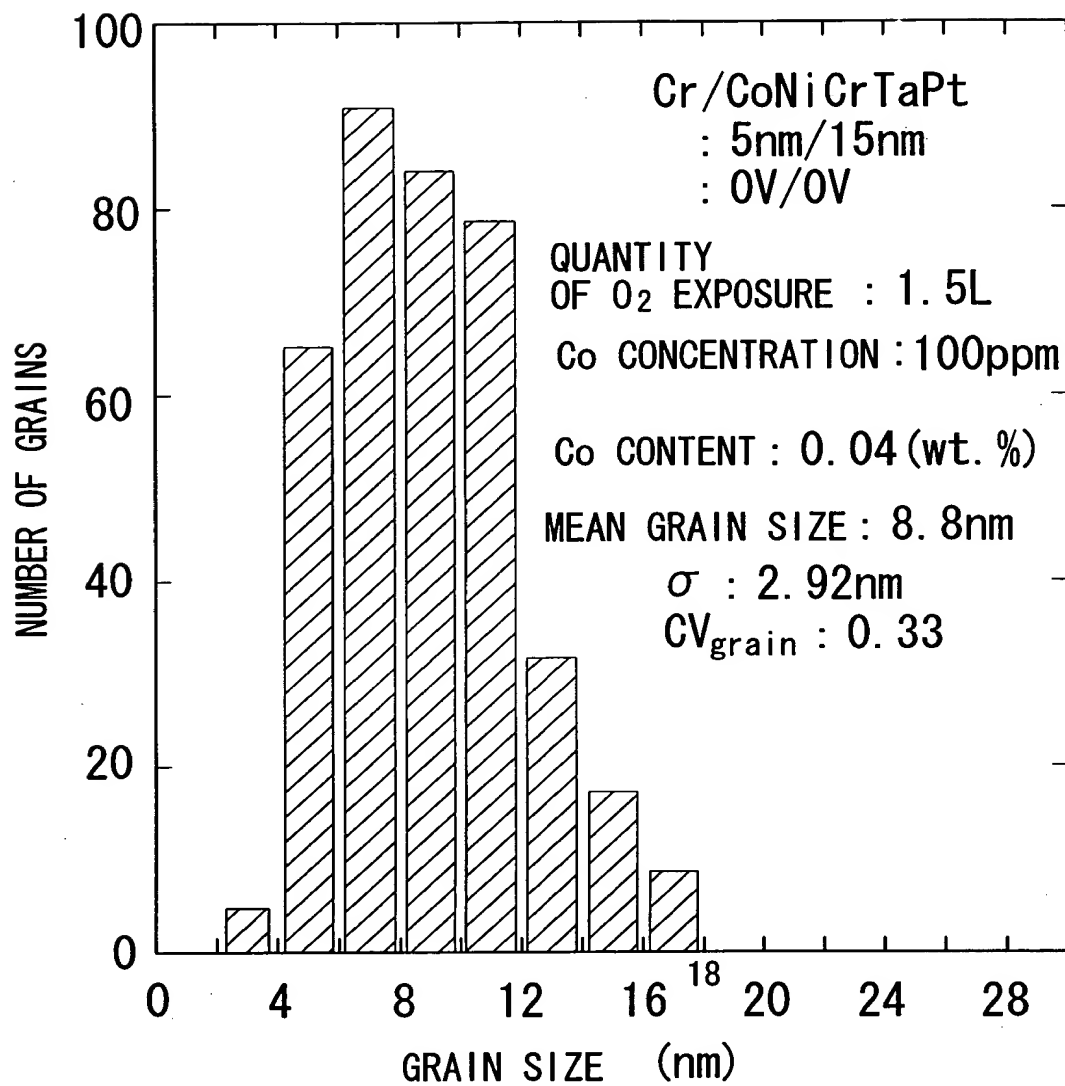


FIG. 20

Cr/Co₆₄Ni_{12.5}Cr₁₅Ta_{3.5}Pt₅ (5/15nm)
(O₂:1.5L)

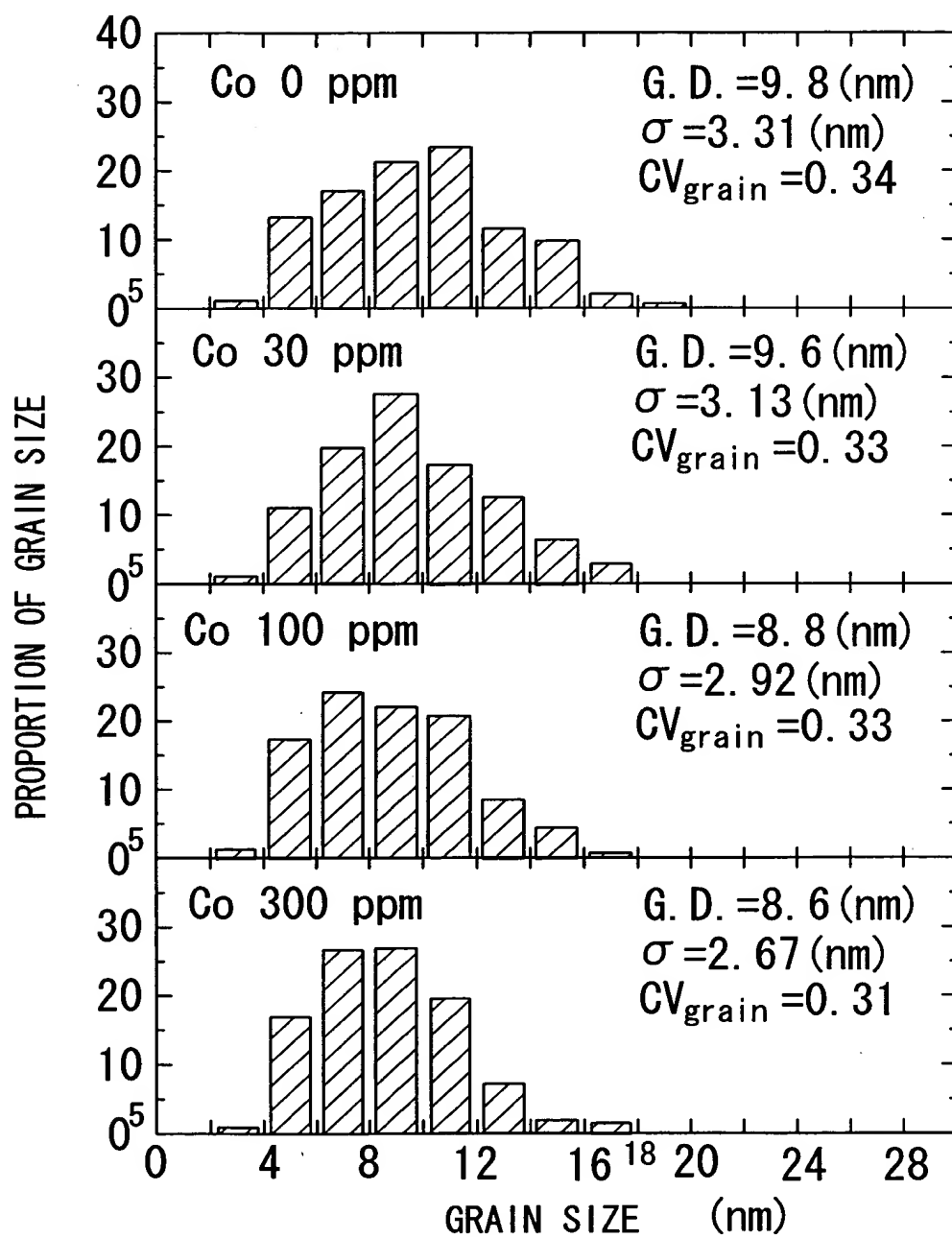


FIG. 21

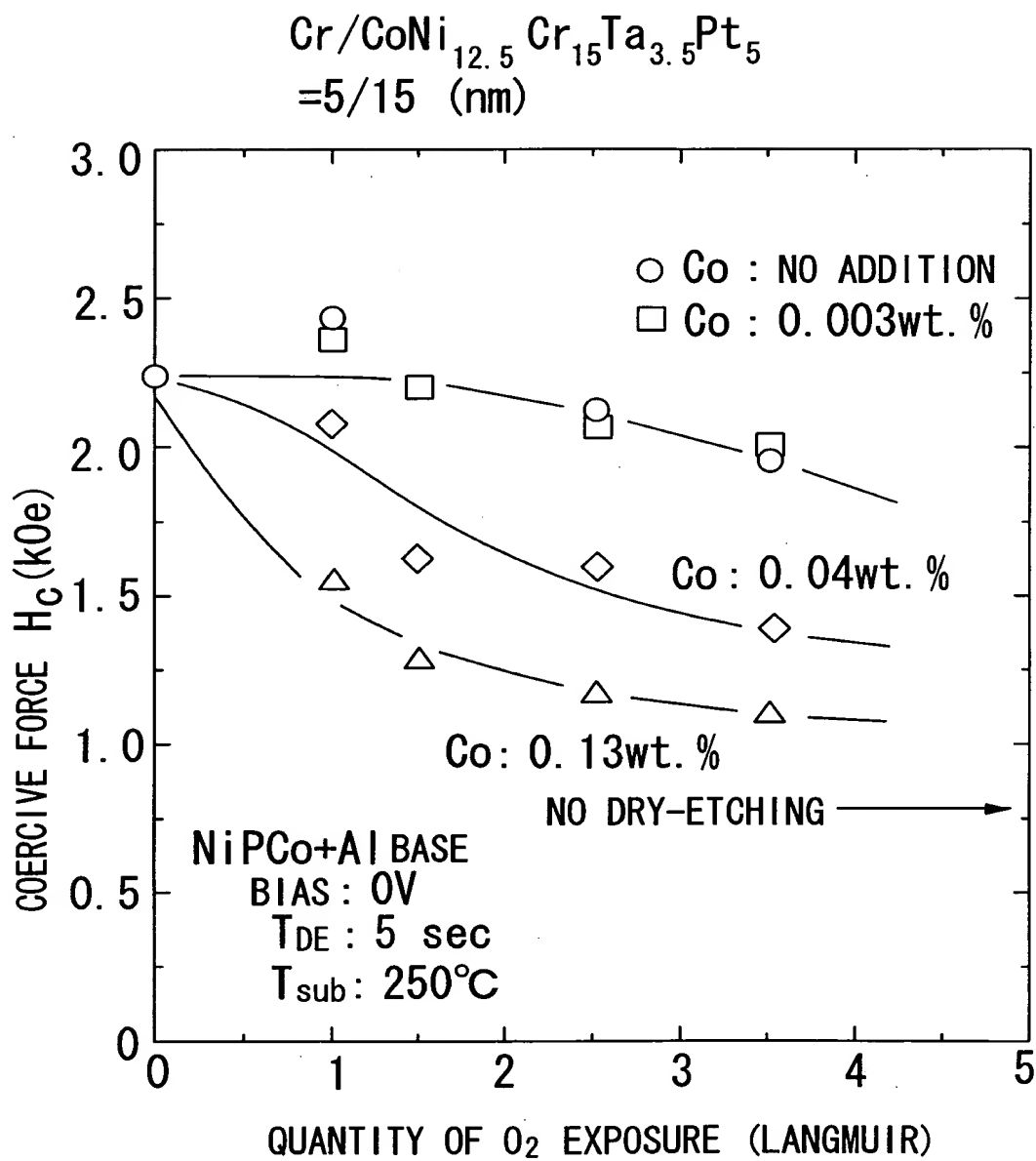


FIG. 22

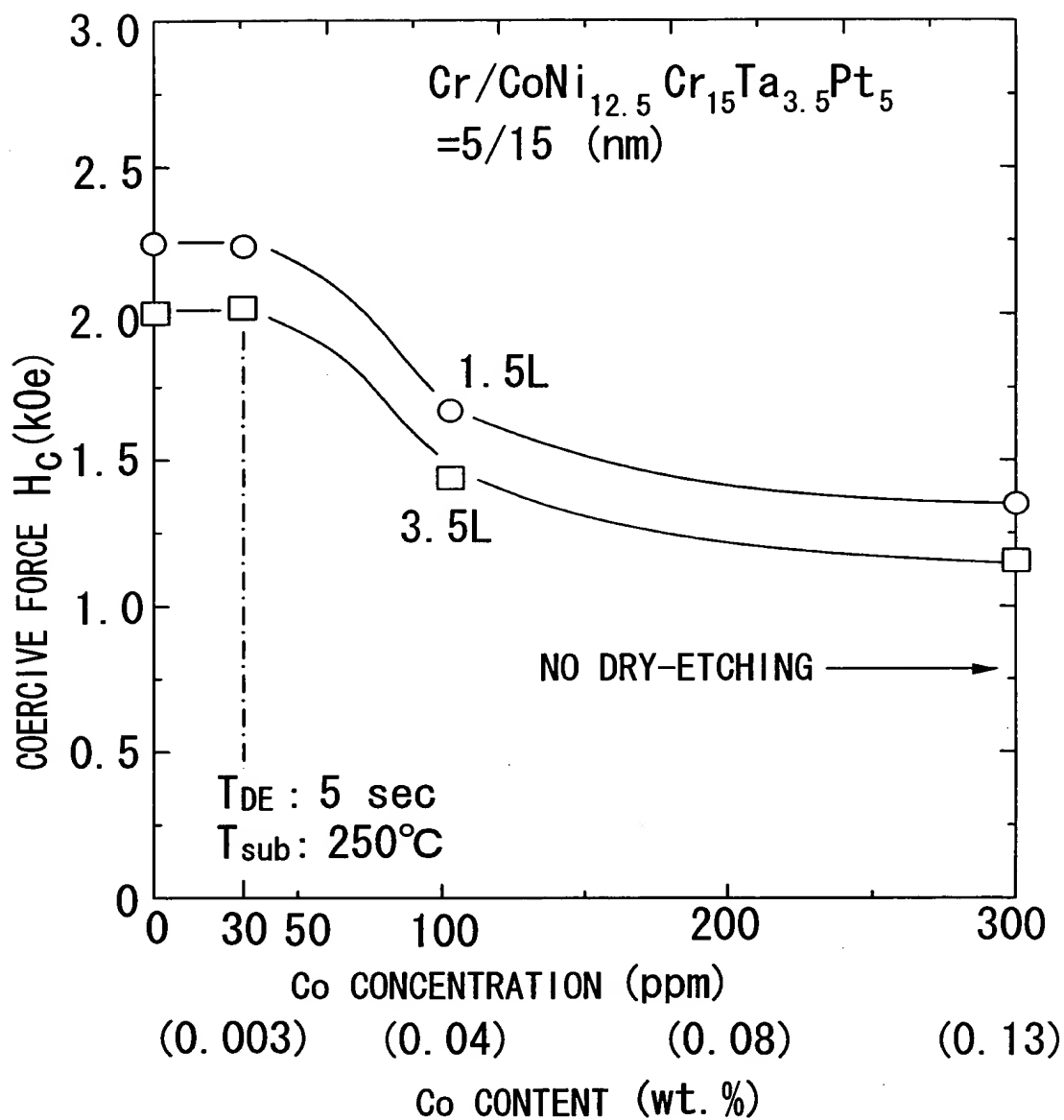


FIG. 23

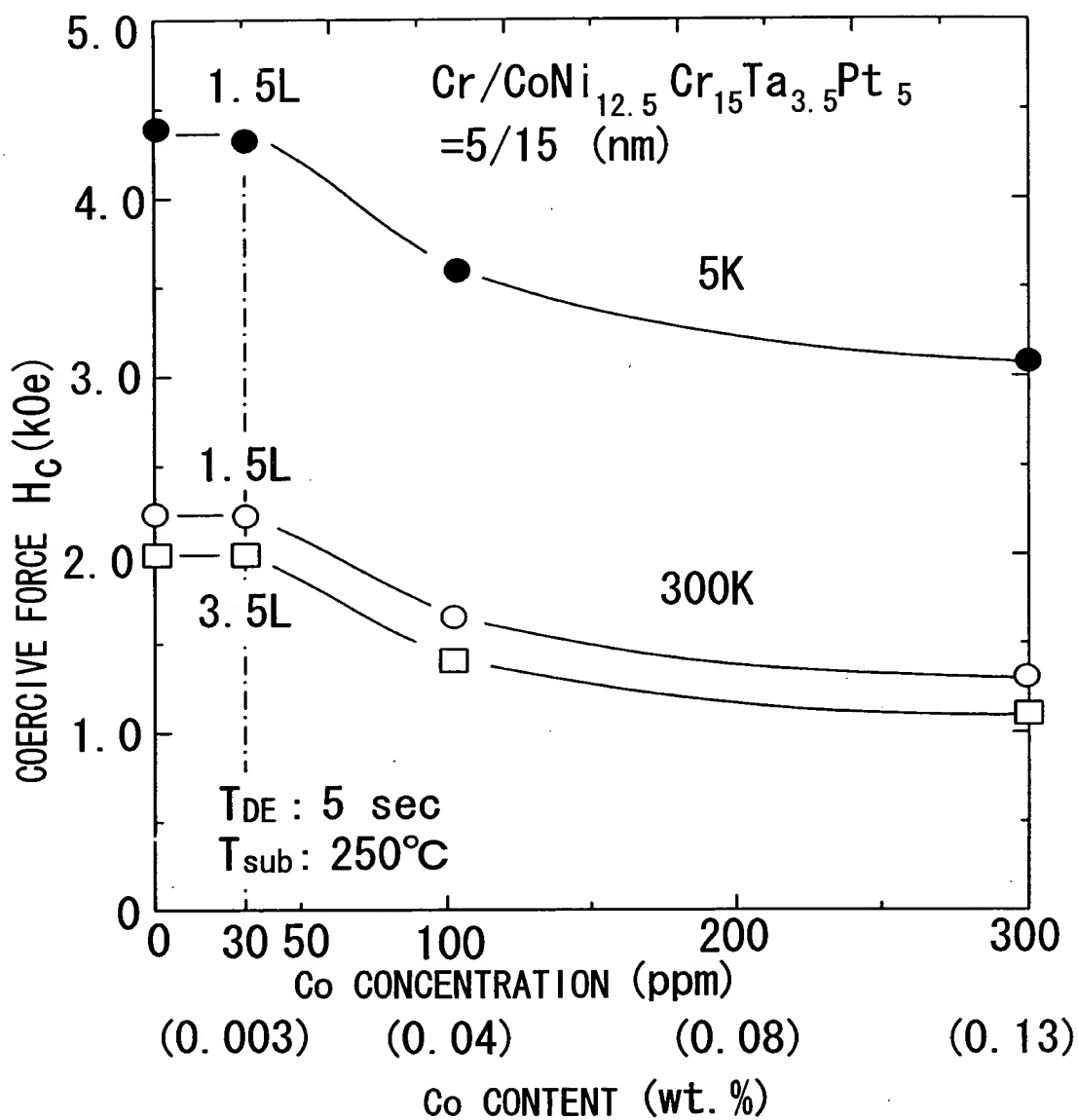


FIG. 24

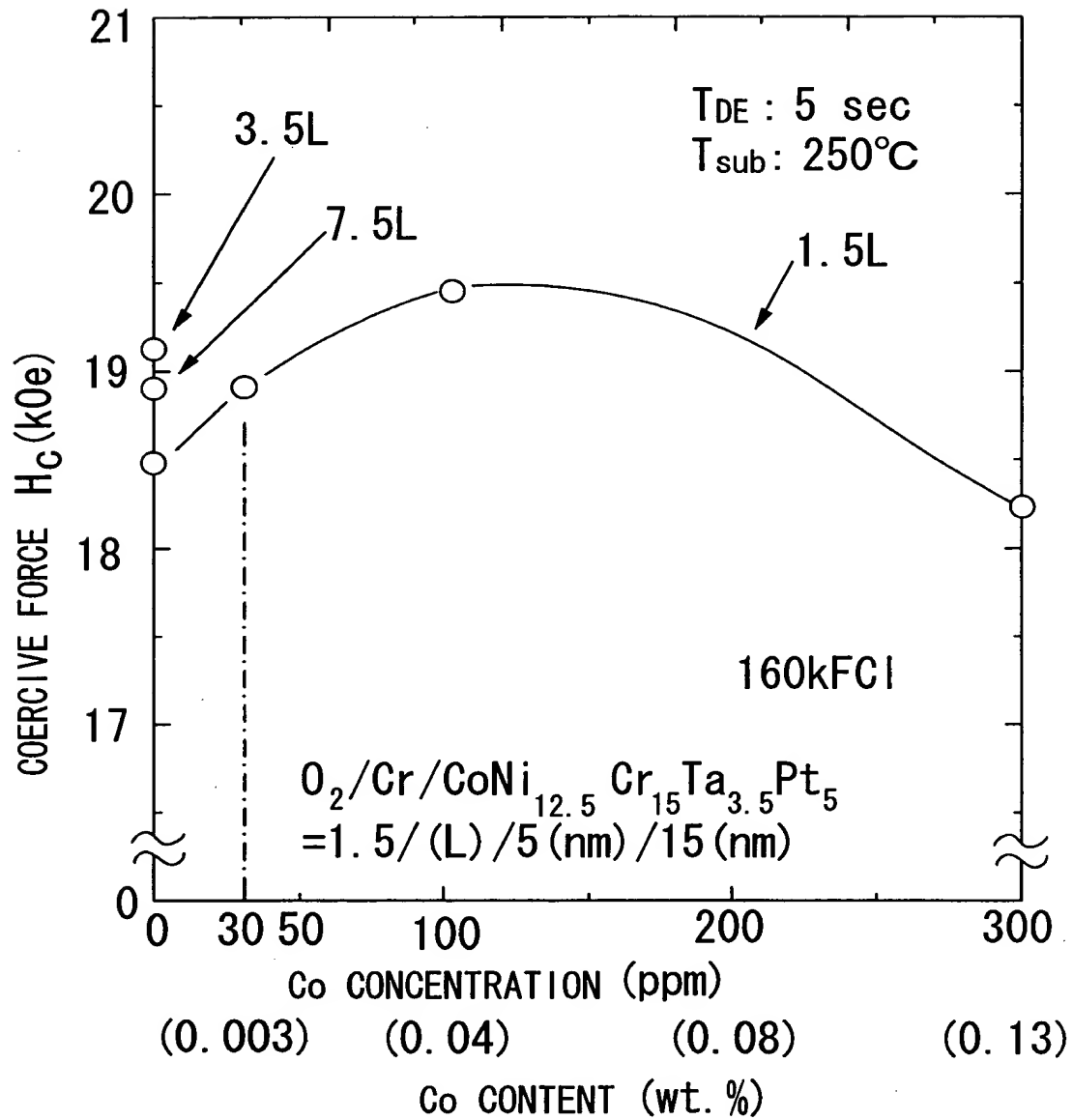


FIG. 25

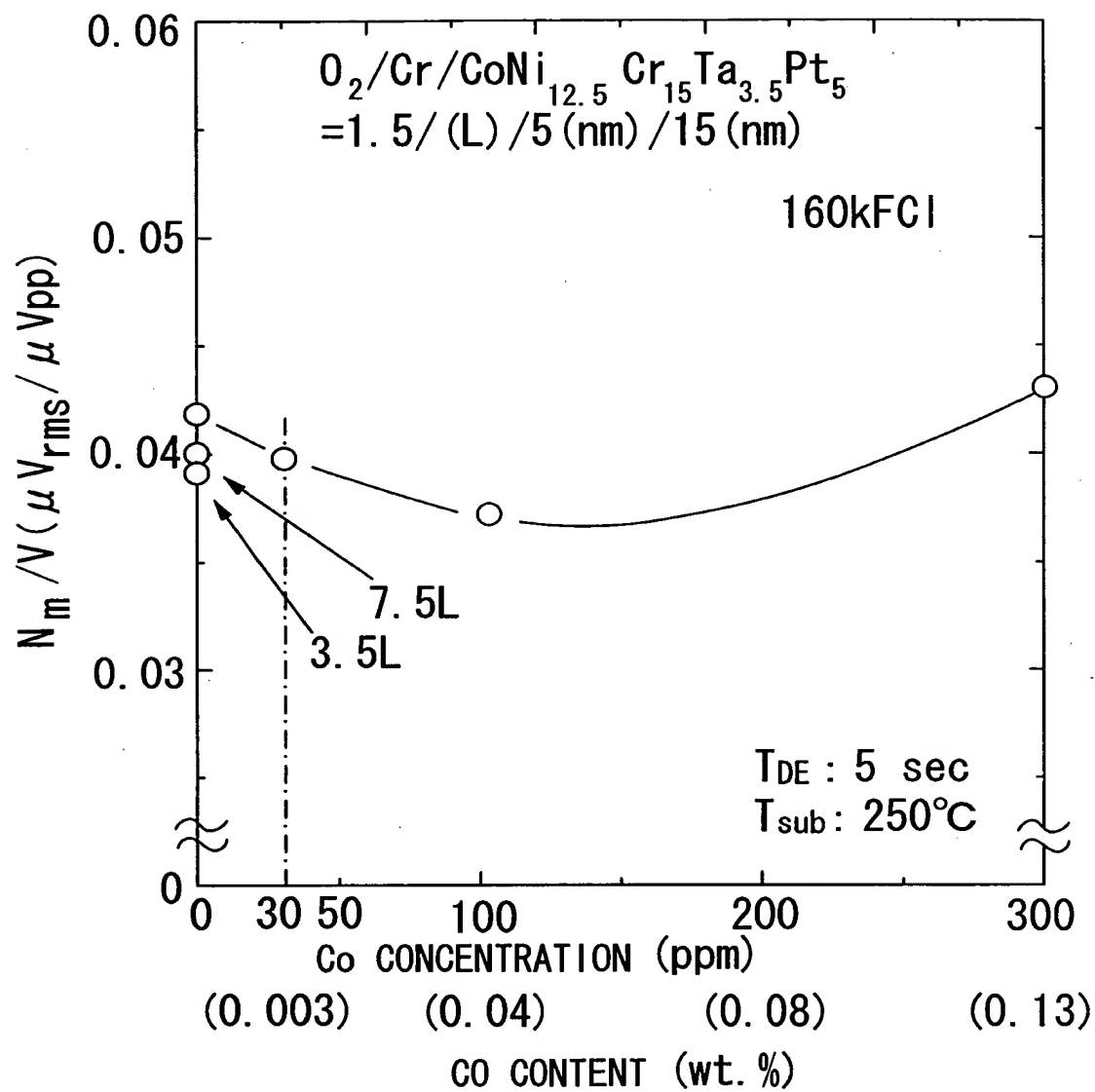


FIG. 26

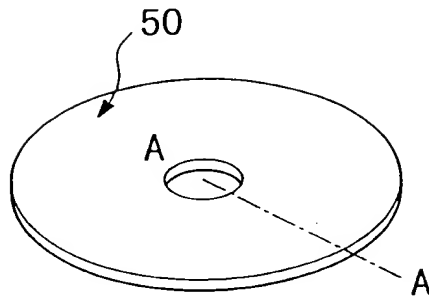


FIG. 27

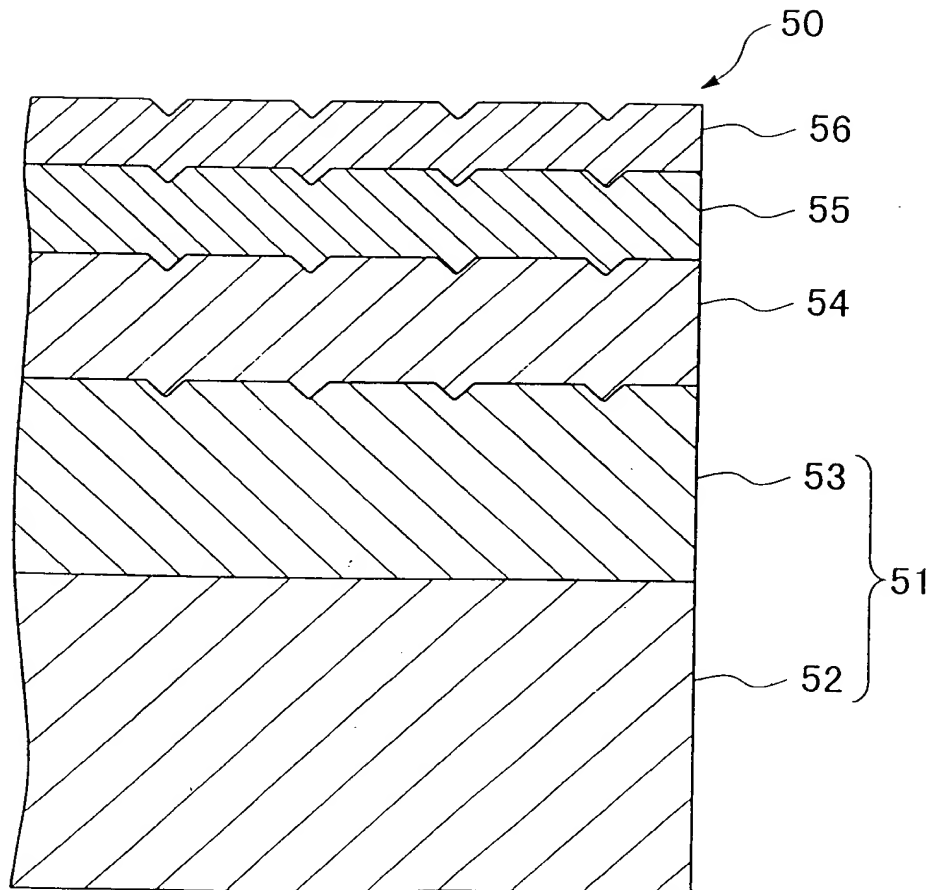


FIG. 28

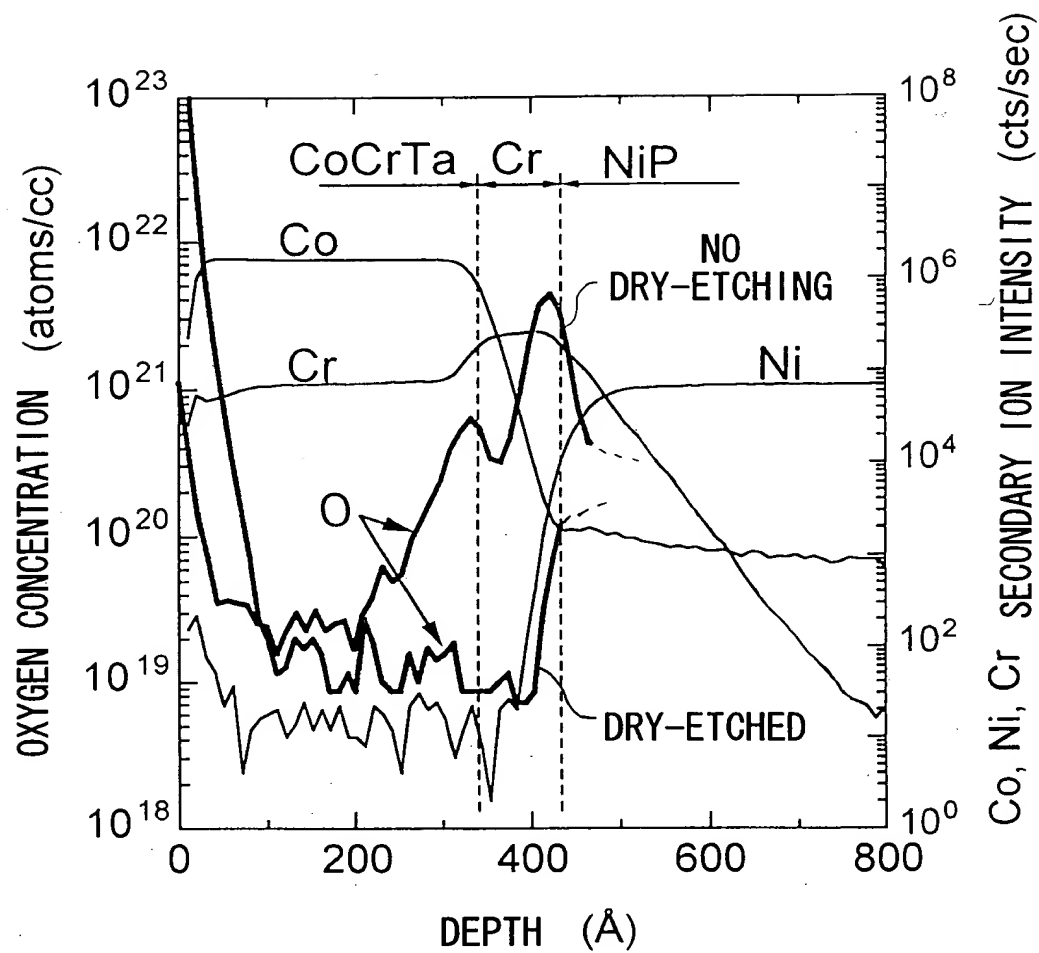


FIG. 29

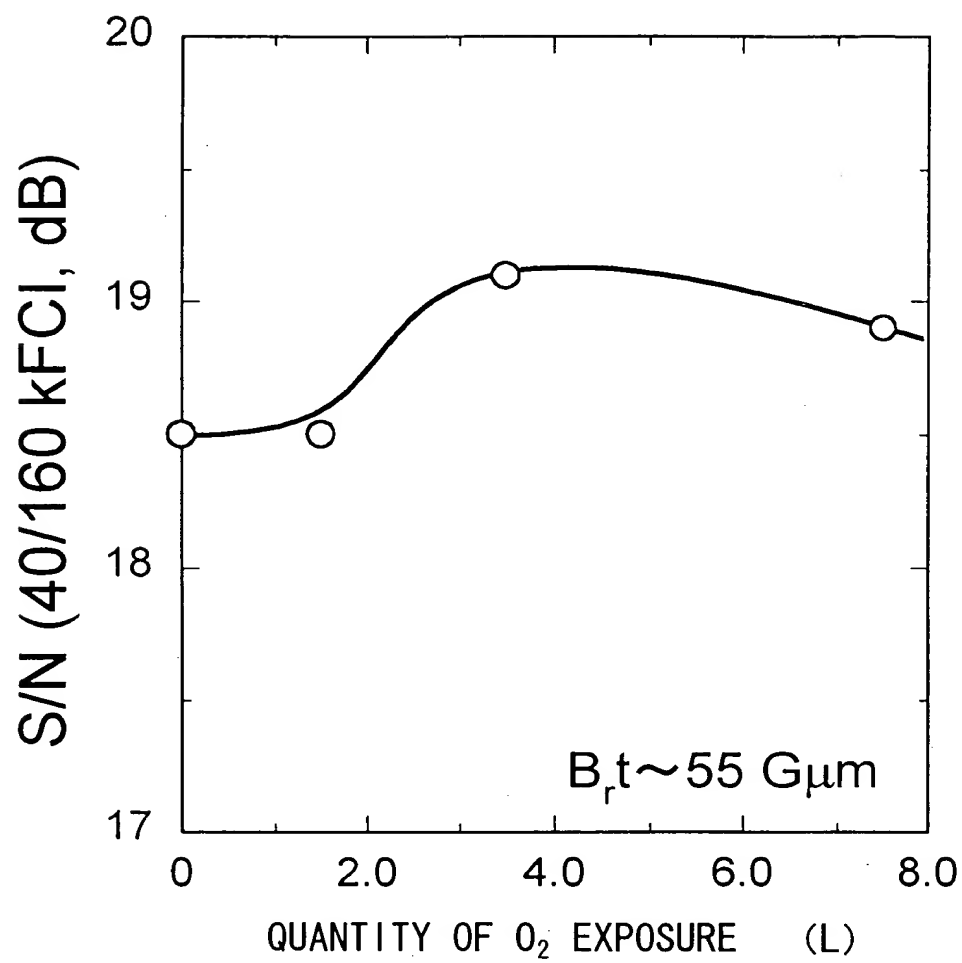


FIG. 30

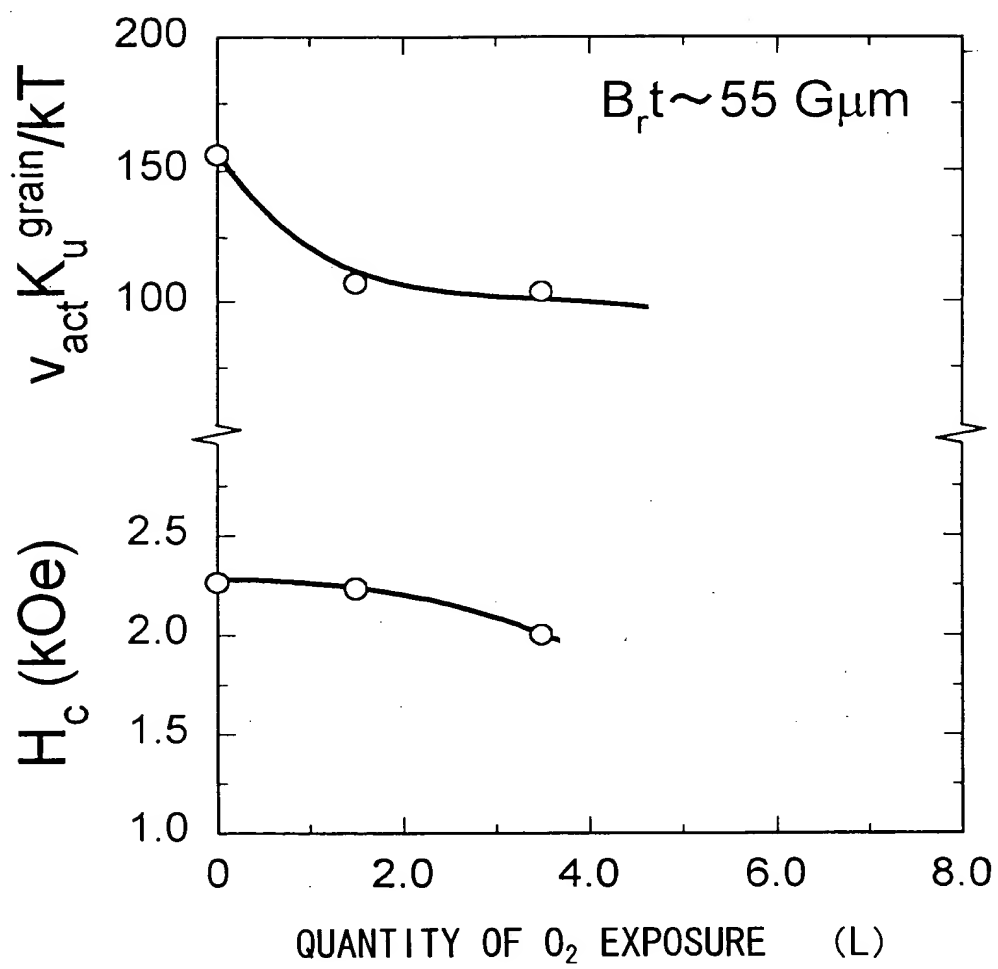


FIG. 31

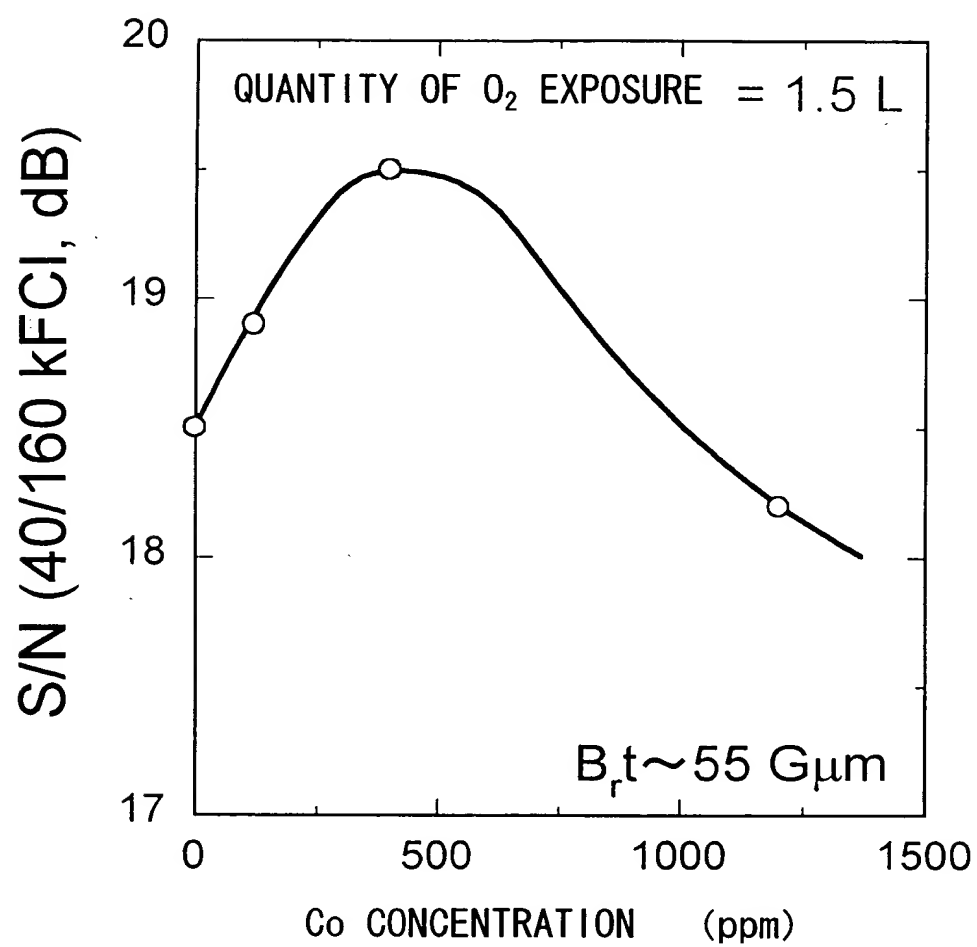


FIG. 32

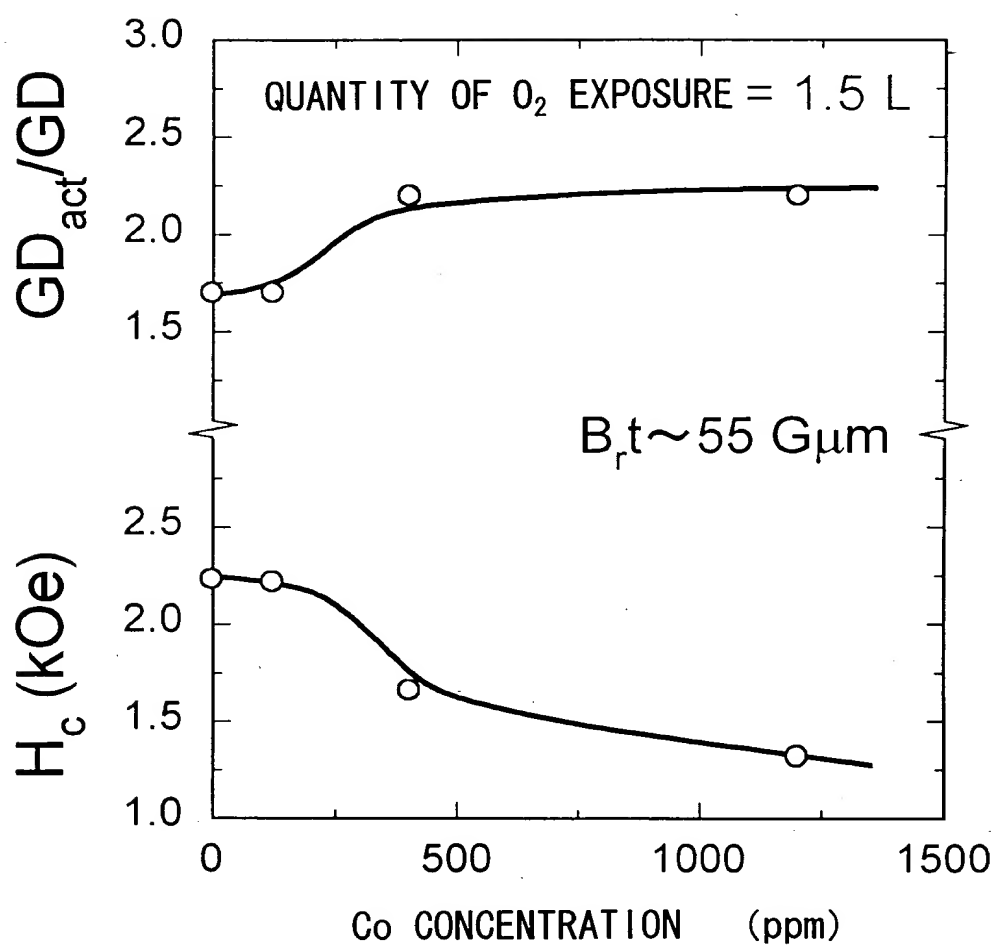


FIG. 33

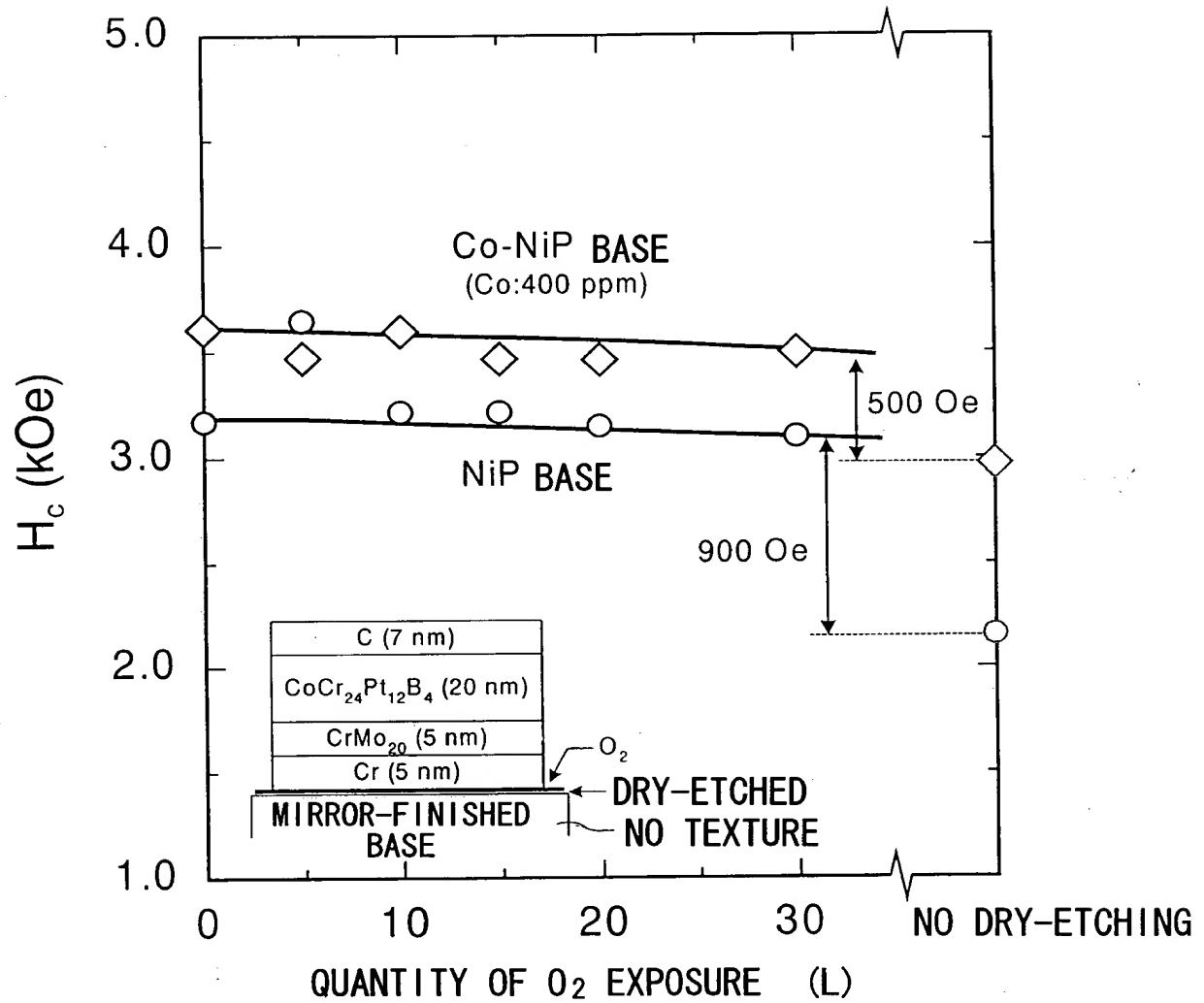


FIG. 34

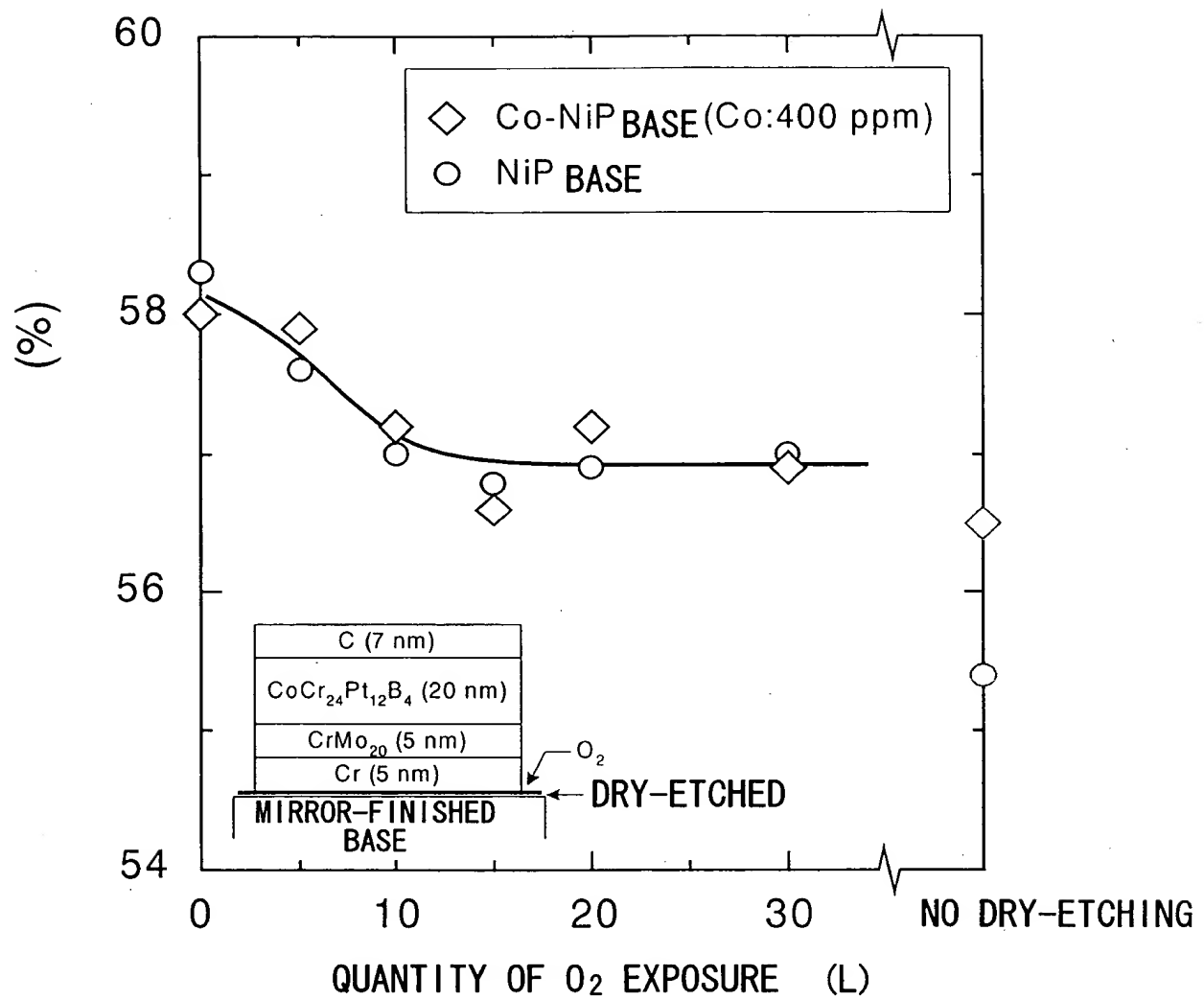


FIG. 35

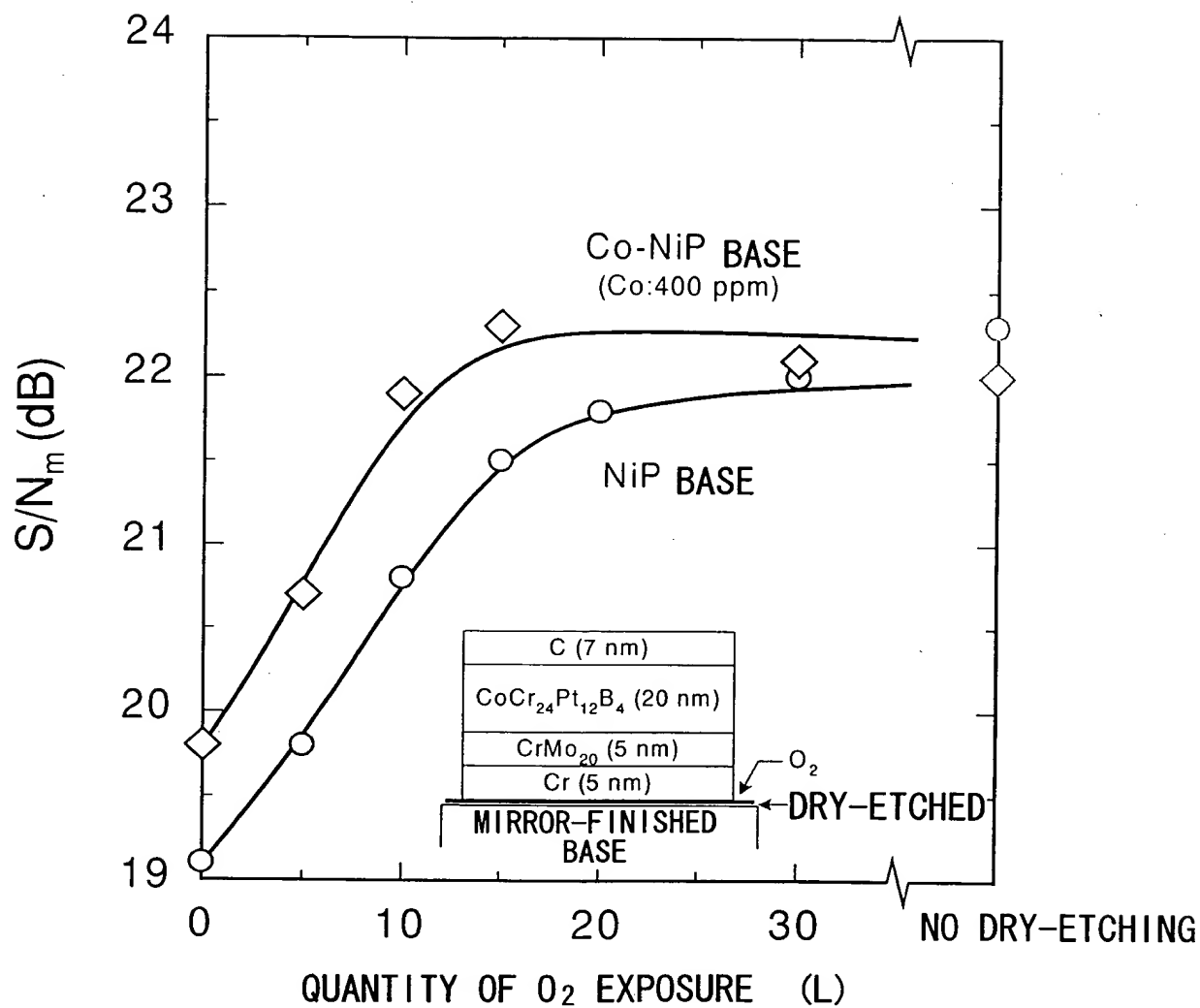


FIG. 36

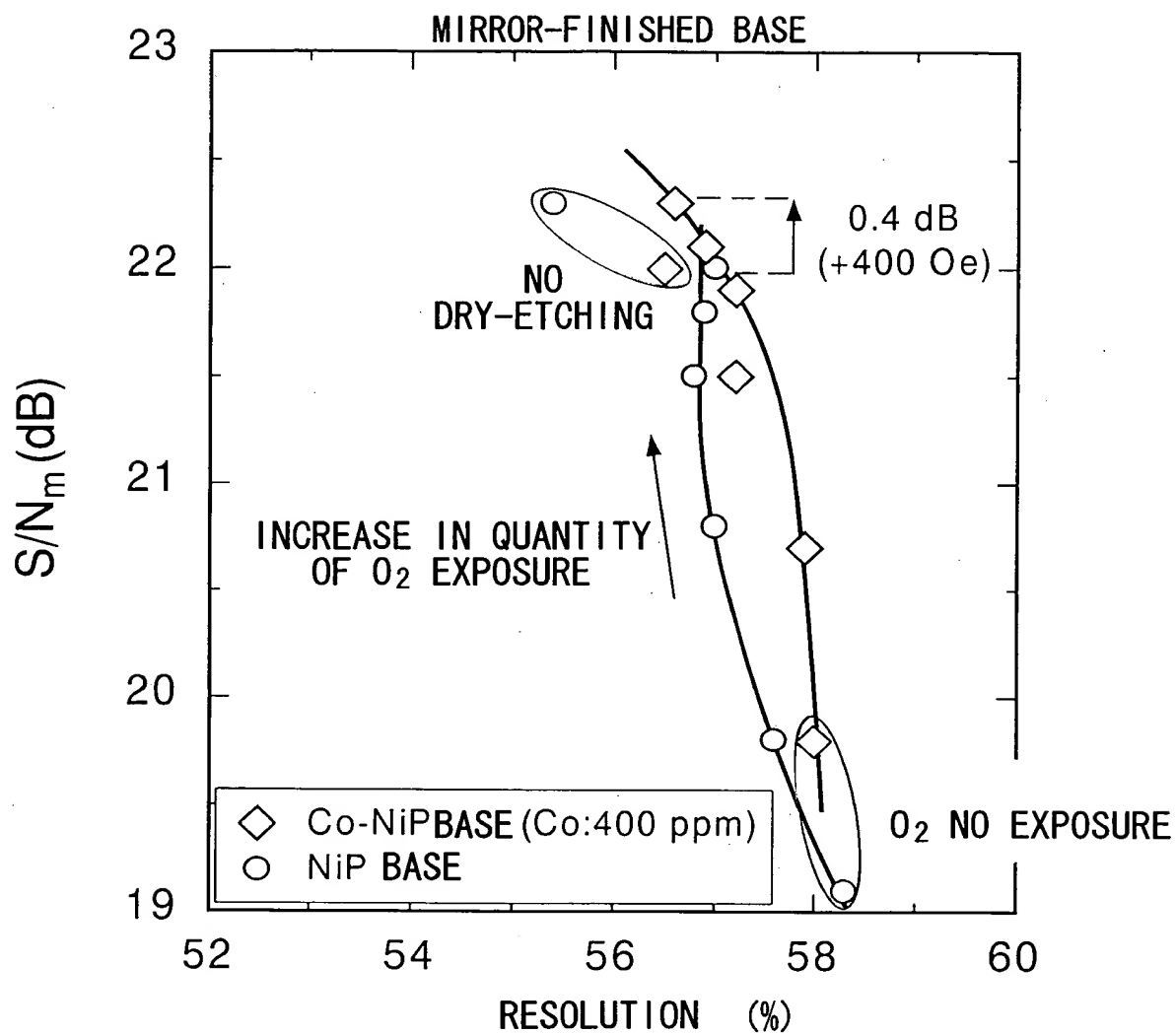


FIG. 37

